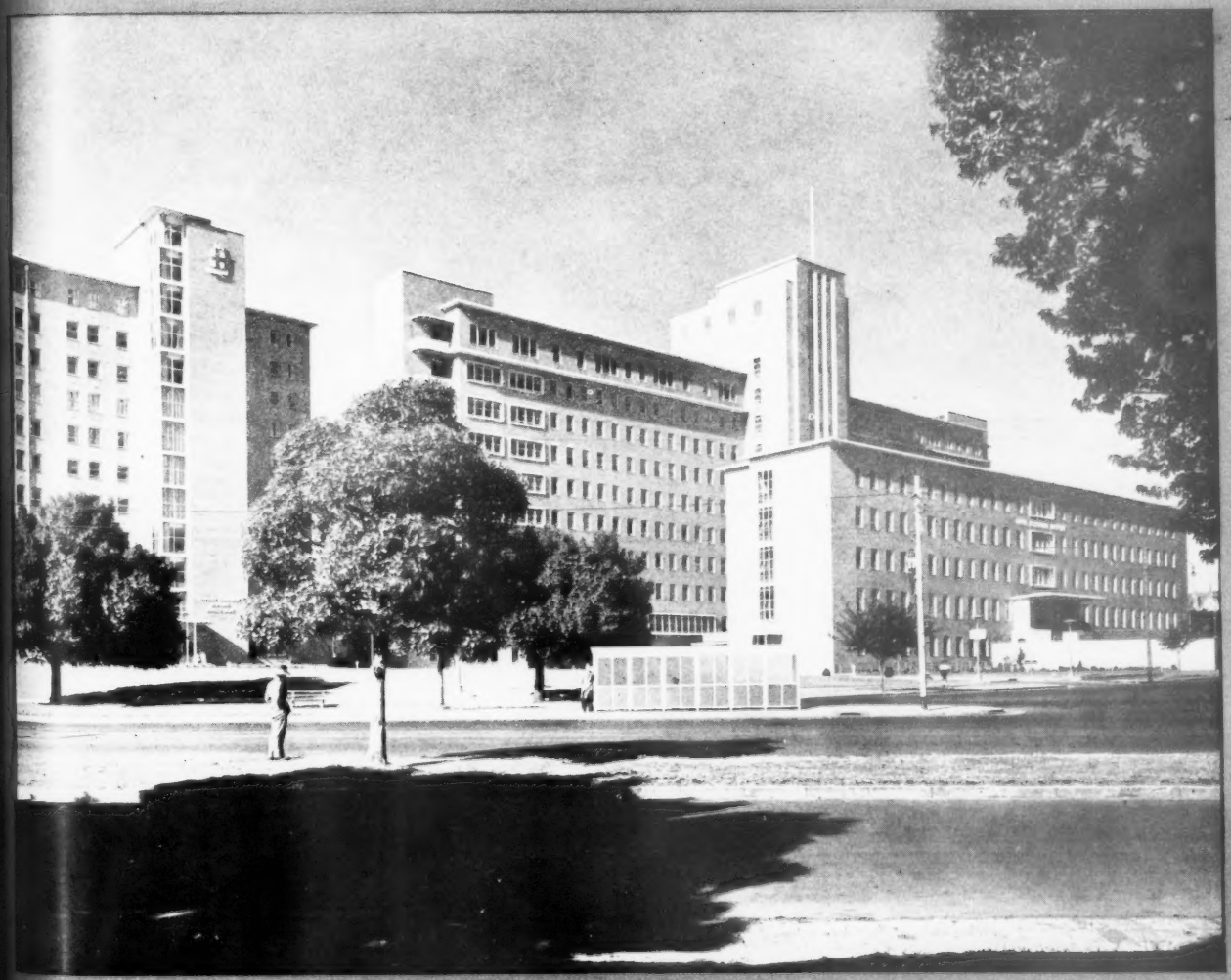
THIRD SERIES VOL 54 NUMBER 10 JULY 1947

THE JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

66 PORTLAND PLACE LONDON W1 · TWO SHILLINGS AND SIXPENCE



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Birthday Honours List

The following names and honours have been extracted from the King's Birthday Honours Civil List: *Knight Bachelor* Charles J. Mole, O.B.E., M.V.O. [*F*], Director-General of Works, Ministry of Works, *C.H.* James Bone [*Hon. A*], J. W. Robertson Scott, Founder and lately editor of THE COUNTRYMAN, *C.M.G.* F. W. Smith, for services when Director-General of Building Materials, Ministry of Works, *K.B.E.* William Castle Cleary, Deputy Secretary, Ministry of Education, *C.B.E.* (Civil Division), H. M. Fairweather [*F*], for service to building construction, S. L. G. Beaufoy [F], Assistant Secretary, Ministry of Town and Country Planning, Rowland Nicholas, City Engineer and Surveyor, Manchester, Frank Wolstencroft, General Secretary, Amalgamated Society of Woodworkers, R. A. Barker, Assistant Secretary, Ministry of Works, J. M. Woods, Assistant Secretary, War Damage Commission, *O.B.E.* (Civil Division) W. T. Fraser [*L*], Assistant Chief Architect, Ministry of Works, S. Pointon Taylor [*F*], Architect, Ministry of Health, Herbert Halliday, Director, National Federation of Clay Industries, H. A. N. Medd [*F*], Chief Architect, Central Public Works Department, Government of India, *M.B.E.* (Civil Division) C. Bertram Parkes [*L*], Chief Architect, Bournville Village Trust, *I.S.O.* G. Howard Jones, M.C. [*A*], Senior Architect, Ministry of Works.

Revision of the R.I.B.A. Scale of Professional Charges

At their meeting on 24 June 1947 the Council approved a recommendation of the Practice Committee that the Scale of Charges should be amended as follows:—

(i) £200 and £4,000 be substituted respectively for £100 and £2,000 as the contract sums applicable to the basic percentage scale under Clause 2 (*a*) (ii).

(ii) Until further notice, on all final accounts for fees chargeable under Clauses 2 and 7 up to and not exceeding a total of £1,150, there shall be a surcharge of 15 per cent on the first £1,000 of the fee.

In accordance with Bye-law 38, the Council give notice that these amendments will be confirmed by them at their meeting on 14 October 1947, subject to consideration of any comments or criticisms which may be received from members. Such comments or criticisms should, in accordance with the above-mentioned Bye-law, be submitted within fourteen days of the date of issue of this JOURNAL.

School Design: Special Lectures and Exhibition

With a view to carrying out the recommendations of the Ministry of Education that the R.I.B.A. should take steps to increase the number of architects available for work on school buildings, the Institute has arranged for a special three-day course of lectures and an exhibition to be held at 66, Portland Place from 23 to 25 October. The course will be open to members of the R.I.B.A. and of the Allied Societies, while in addition local authorities throughout England and Wales will be asked to send architect representatives to attend the course. In the next issue of the JOURNAL a more complete programme will be printed and an application form for tickets will be enclosed. Members should return their application forms early as seating capacity is limited and seats will be allocated in strict rotation; application for tickets should *not* be made until the forms are issued with the next JOURNAL. It is hoped to provide catering facilities during the course.

The provisional programme is as follows: Thursday 23 October. Morning: *State-aided schools*. Afternoon: *Nursery, Infant, Junior and Primary Schools*. Friday 24 October. Morning: *Secondary Schools*. Afternoon: *Natural Lighting*; *Artificial Lighting*; *Heating and Ventilation*. Saturday 25 October. Morning: *Use of Materials*; *Acoustics*. The list of speakers is being arranged and will be announced in due course.

The Exhibition will be small and will confine itself to technical points of interest. Plans and illustrations of schools of similar types in other countries will be included. This exhibition will be on view for the period of the course only. It will be the prelude to a much larger and more popular exhibition on schools which will be staged at the Institute in the Spring of next year.

R.I.B.A. Prizes and Studentships Pamphlet 1947–48

The official booklet containing full information upon the various R.I.B.A. Prizes and Studentships together with detailed programmes of competitions, has now been published at a price of 2*s.* exclusive of postage, or 2*s.* 3*d.* including postage. Copies may be obtained from the Secretary to the Board of Architectural Education, 66 Portland Place, W.1.

Annual Election Results

Report to the Chairman of the General Meeting, 24 June 1947

The Scrutineers appointed to count the votes for the Election of the Council for the Session 1947-48 *beg to report as Follows*:

2,703 *envelopes were received*—636 *from Fellows*, 1,429 *from Associates, and* 638 *from Licentiates.*

The result of the election is as follows:

COUNCIL, 1947-48

President:

SIR LANCELOT HERMAN KEAY, K.B.E. (Liverpool) (unopposed).

Past Presidents:

HARRY STUART GOODHART-RENDEL (unopposed).
SIR PERCY EDWARD THOMAS (Cardiff) (unopposed).

Members of Council:

Elected		*Votes*
1.	EDWIN MAXWELL FRY	1,698
2.	CECIL GEORGE STILLMAN	1,679
3.	LEONARD CECIL HOWITT	1,428
4.	VICTOR BAIN	1,187
5.	JOHN SWARBRICK	1,174
6.	MICHAEL THEODORE WATERHOUSE	1,140
7.	ARTHUR CHARLES BUNCH	1,053
8.	PERCY JAMES BARTLETT	843
Not Elected		*Votes*
9.	CHARLES HERBERT ASLIN	820
10.	EDWARD WILLIAM ARMSTRONG	710
11.	CHARLES HOLLOWAY JAMES	708
12.	GORDON STEPHENSON	671
13.	THOMAS EDWARD SCOTT	668
14.	GEORGE FAIRWEATHER	592
15.	FRANK REGINALD STEELE	561
16.	JOHN PRICE NUNN	535
17.	JOHN SOMERVILLE BEAUMONT	515
18.	CECIL GEORGE KEMP	438
19.	CLIFFORD EWART CULPIN	428
20.	MARK HARTLAND THOMAS	423
21.	ANTOINE ENGLEBERT GEENS	347
22.	BASIL CHARLTON DEACON	273
23.	ALFRED HENRY BARNES	261
24.	THOMAS JOSEPH LYNCH	202
25.	ALBERT LEIGH ABBOTT	174
26.	JAMES FREDERICK HOWES	173

2,685 Voting Papers were received, of which 8 were invalid.

Associate Members of Council:

Elected		*Votes*
1.	PROFESSOR WILLIAM GRAHAM HOLFORD	1,386
2.	PROFESSOR JOSEPH STANLEY ALLEN	1,246
3.	COLIN TROUGHTON PENN	1,083
Not Elected		*Votes*
4.	THE HON LIONEL GORDON BALIOL BRETT	572
5.	ARTHUR GEORGE LING	449
6.	DR. JOHN LESLIE MARTIN	406
7.	HENRY THOMAS CADBURY-BROWN	404
8.	ROBERT HOGG MATTHEW	377
9.	MAURICE EWAN TAYLOR	375
10.	WILLIAM JAMES WYNN	275
11.	JOHN WILLEY POLLOCK	244
12.	WINSTON WALKER	208
13.	WALTER WILLIAM FISK	188
14.	CLARENCE LONSDALE WATSON	101

2,675 Voting Papers were received, of which 8 were invalid.

Licentiate Member of Council:

Elected		*Votes*
1.	BERNARD HUGH COX	1,062
Not Elected		*Votes*
2.	BERNARD WIDDOWS	484
3.	CLARENCE BERTRAM PARKES	431
4.	ROBERT BOSTOCK	186
5.	THOMAS SIBTHORP	85

2,259 Voting Papers were received, of which 11 were invalid.

Representatives of Allied Societies in the United Kingdom or the Irish Free State

(1) *Six Representatives from the Northern Province of England*
ROBERT NORMAN MACKELLAR (Northern Architectural Association)
PHILIP GARLAND FAIRHURST (Manchester Society of Architects)
PROFESSOR LIONEL BAILEY BUDDEN (Liverpool Architectural Society)
ANDREW RANKINE (York and East Yorkshire Architectural Society)
NORVAL ROWALLAN PAXTON (West Yorkshire Society of Architects)
DAVID BARNES JENKINSON (Sheffield, South Yorkshire and District Society of Architects and Surveyors)

(2) *Five Representatives from the Midland Province of England*
SAMUEL JOSEPH STAINTON (Birmingham and Five Counties Architectural Association)
PERCY HERBERT GRUNDY (Leicester and Leicestershire Society of Architects)
PAUL JOHN JAMES PANTER (Northamptonshire, Bedfordshire and Huntingdonshire Association of Architects)
ROBERT EDWIN MONTAGU COOMBES (Nottingham, Derby and Lincoln Architectural Society)
ARTHUR GILBERT BERRY (East Anglian Society of Architects)

(3) *Six Representatives from the Southern Province of England*
FREDERICK JOHN TAYLOR (Devon and Cornwall Architectural Society)
SAMUEL ERNEST URWIN (Wessex Society of Architects)
HAROLD FRANCIS HURCOMBE (Berks, Bucks and Oxon Architectural Association)
One Representative to be nominated by the Hampshire and Isle of Wight Architectural Association.
DUDLEY JAMES MCPHERSON BURTON (Essex, Cambridge and Hertfordshire Society of Architects).
One Representative to be nominated by the South Eastern Society of Architects.

(4) *Four Representatives of the Allied Societies in Scotland nominated by the Council of the Royal Incorporation of Architects in Scotland.*
ANDREW GRAHAM HENDERSON (Glasgow).
LOCKHART WHITEFORD HUTSON (Hamilton).
ALEXANDER GEORGE ROBERTSON MACKENZIE (Aberdeen).
ALFRED HUGH MOTTRAM (Edinburgh).

(5) *One Representative of Allied Societies in Wales nominated by the Council of the South Wales Institute of Architects*
GORDON HERBERT GRIFFITHS (Cardiff).

(6) *Two Representatives of Allied Societies in Ireland*
FRANCIS MCARDLE (Royal Institute of the Architects of Ireland).
ROBERT HANNA GIBSON (Royal Society of Ulster Architects).

Representatives of the Allied Societies in the British Dominions Overseas

To be nominated by the Councils of each of the following:
The Royal Architectural Institute of Canada.
The Royal Australian Institute of Architects.
The New Zealand Institute of Architects.
The Institute of South African Architects.
The Indian Institute of Architects.

Representative of the Architectural Association (London)
ANTHONY MERLOTT CHITTY.

Representative of the Association of Architects, Surveyors and Technical Assistants (now the Association of Building Technicians)
KENNETH JOHN CAMPBELL.

Chairman of the Board of Architectural Education
ARTHUR BEDFORD KNAPP-FISHER.

Chairman of the R.I.B.A. Registration Committee
DARCY BRADDELL.

Chairman of the R.I.B.A. Official Architects' Committee
(To be appointed.)

Representative of the R.I.B.A. Salaried Members' Committee
(To be appointed).

Chairman of the R.I.B.A. Allied Societies' Conference
CYRIL FREDERICK MARTIN (Birmingham).

Honorary Auditors
JOHN NEWENHAM SUMMERSON (unopposed.)
CECIL BURNS (unopposed).

ERNEST G. ALLEN [*F*], *Chairman*
C. J. EPRIL [*F*]
RICHARD BETHAM [*A*]
HAROLD E. MOSS [*F*]
F. L. HYETT [*L*]
A. FOSTER [*F*]
E. D. LYONS [*A*]
CHARLES SYKES [*A*]
JOSEPH F. DIXON [*A*]
C. H. PERKINS [*A*]
HOWARD L. KELLY [*A*]
G. H. FIELDER [*A*]
JOHN A. WHITTAKER [*L*]
Scrutineers.

18 *June* 1947.

OFFICERS FOR THE SESSION 1947 48

The following officers have been elected for the Session 1947 48.

Vice-Presidents

CHARLES HOLLOWAY JAMES, R.A. [*F*]
CYRIL FREDERICK MARTIN, M.C., M.A. [*F*]
CECIL GEORGE STILLMAN [*F*]
MICHAEL THEODORE WATERHOUSE, M.C. [*F*]

Honorary Secretary

ARTHUR LEONARD ROBERTS [*F*]

Honorary Treasurer

JOHN LEOPOLD DENMAN, J.P. [*F*]

The Dublin Conference

Those architects who have never attended a R.I.B.A. Conference are inclined to wonder what it is all about. Some think it to be no more than a pleasant three-day party; others imagine it to be a rather boring succession of functions. Let us admit at once that no verbal description can convey fully the purpose, atmosphere and results of a successful Conference. A Conference has to be experienced. Therefore beyond saying that the local Allied Society and its members meet and entertain the local notabilities, that the local press gives great prominence to architecture and architects, that members of all grades and types meet on common ground, discuss common problems and discover how likeable are their fellow architects, that there is much serious discussion on technical matters, that there is much unofficial and frivolous discussion on political, social and human matters, that parties visit interesting buildings ancient and modern in the locality and finally that architecture and architects are in the public eye in an important town for three days, there is not much that can be said. And the foregoing ponderous sentence by no means conveys a true impression.

The purpose of this note is to tell those members who did not attend that the Dublin Conference was a great success; there is no need to tell those who did attend. It was a success quite apart from the special contributions to gaiety and well-being that Dublin can make today (such as bacon and eggs); these physical attractions naturally had a beneficent effect on the visitors from overseas. But the Conference was a success primarily because it was extremely well organized by the Executive Conference Committee of the R.I.A.I. To that were added traditional Irish charm and hospitality, skilled speakers on both formal and informal occasions, a city of peculiar attraction to architects and finally superb weather.

The Informal Reception by the Irish Institute on the first evening was one of those crowded noisy affairs, enlivened by the flash bulbs of photographers snapping groups of notabilities, at which old friends met and new friends were made—the kind of affair one describes as 'a really jolly party'. On Thursday morning the Lord Mayor welcomed everyone at the Mansion House, the President delivered his Inaugural Address and Mr. S. E. T. Cusdin [*A*] delivered the paper on 'Recent Trends in Hospital Design' by Mr. J. Murray Easton [*F*] and himself.

After lunch everyone assembled in the main court of Trinity College to be photographed; a photograph showing a broadly smiling group resulted because one of the College students standing by made a 'cuckoo' noise at the critical moment. This was followed by tea in the Provost's and Fellows' Garden on a tree-girt stretch of smooth lawn backed by the façade of the College Library built in 1832 by Thomas Burgh who is described in the handsome Conference Handbook as 'a gentleman architect of the Burlington category'! In the evening came the Conference Banquet at Robert Atkinson's Gresham Hotel, with speeches admitted by all to have been excellent, a non-austerity menu and a charming musical entertainment.

On Thursday morning Mr. R. S. Wilshere [*F*] gave a paper on 'Modern School Buildings' (at short notice in place of Mr. W. T. Benslyn [*F*] who was unwell), provoking a long and earnest technical discussion and a large attendance of members. This was in spite of the counter-attraction of all-day motor-coach tours in which those members not interested in school-buildings participated and those ladies who were not shopping. The afternoon was devoted to visits to notable Dublin buildings, of which there is an abundance.

The Conference Dance, again at the Gresham Hotel, filled the evening in a very satisfactory way; but at 2 a.m. some of the British members stole away for sleep, not being able to 'take' a third night of the Irish habit of holding private unofficial parties after official functions. Nevertheless Saturday morning saw a good attendance for the visit to Guinness's brewery, without which no Conference in Dublin is complete.

Finally we offer our editorial congratulations to the Handbook Sub-Committee on the beautiful production of the Conference Handbook and specially to the editor, Mr. Raymond McGrath [*F*], whose drawings are a notable contribution to it.

Brian O'Rorke [*F*] made A.R.A.

Mr. Brian O'Rorke [*F*] is to be congratulated on his election as an Associate of the Royal Academy.

On the Cover

The Royal Melbourne Hospital by Stephenson and Turner [*F.F.*], Melbourne. Referred to in the paper on *Recent Trends in Hospital Design*. See pp. 452-8. The Nurses' Home is on the left.

At the Inaugural Meeting. L. to R.: Mr. A. Leonard Roberts [*F*], Hon. Secretary, R.I.B.A.; Mr. Stephen Kelly [*F*], President, Royal Institute of the Architects of Ireland; the Lord Mayor of Dublin, Alderman J. McCann, T.D.; the President, R.I.B.A.; the Secretary, R.I.B.A.; Mr. R. H. Gibson [*F*] President, the Royal Society of Ulster Architects; Mr. C. G. Stillman, Vice-President, R.I.B.A.

The Architects' Conference, Dublin

The Inaugural Meeting

Held in the Mansion House, Dublin, 12 June 1947. The President in the Chair

The Lord Mayor of Dublin: It is a real pleasure for me to welcome you to the City of Dublin; and I hope your Conference will be a great success and that you will enjoy your stay in Dublin. May I, at this stage, say that I would like to extend to the President, Sir Lancelot Keay, K.B.E., my heartiest congratulations. I had the pleasure of meeting him when he was Mr. Keay, and a greater dignity could not be conferred on him, in any worldly way, than when he became Sir Lancelot.

In this city we have a tradition of beauty. Down the ages we have had from time to time, from the coming of the Danes in the 9th century, successive forms of Government, and though we may have been displeased with some of them, they did leave behind fine buildings. There are remnants in Dublin of Danish and Norman architecture and the finest specimens of Georgian architecture. I believe that every generation should produce its own masters and its own masterpieces.

While I revere the beauty in the architecture, art, literature and music of the past, still I look to contemporary artists, writers and musicians to produce masterpieces—if it might be put in this way—in the tempo of the day. We have here, in my opinion, as good architects as there are to be found the world over; and I look to the young architects to produce even finer things.

For me, as a writer myself, there is a conflict between the utilitarian and the æsthetic. It would be a good thing when the philosophy of utilitarianism is sweeping the world if we reflected on the beauties left for us by past generations, and if we strove to create beautiful things in our own generation and leave them to posterity.

This Conference brings together architects from Britain and Ireland, but I hope it will do even more than merely bring you together for an exchange of views. I hope that it will be a merging of the minds of British architects and Irish architects, and that in a broader way it will be just one more step in bringing together the minds of the peoples of these two countries in the name of beauty. I believe you from England and we from Ireland have much to offer the world; that we offered it much and that we will do so again. And the closer we work in harmony the better for the peoples of both countries and, if I am presumptuous, the better for the world.

Again may I welcome you to my City of Dublin. I am Lord Mayor now for nearly twelve months; I will not be Lord Mayor in a fortnight's time, and it is my privilege to welcome you here. Welcome everybody.

The President, Sir Lancelot Keay, K.B.E. My first word must be one of thankfulness to you, my Lord Mayor, for your address of welcome to the members of the Conference and for so kindly placing this room at our disposal; to the Royal Institute of the Architects of Ireland for inviting us for the third time to this delightful city and to all those who have given so willingly of their time to ensure the success of this Conference. Without wishing to make any invidious distinction, I should like to mention the very excellent work done by Mr. W. Howard Cooke the Honorary Secretary of the Conference Committee and Mr. Spragg, who has braved tossings upon the waters and bumps in the air to secure the close co-operation necessary. I must also thank the Provost of Trinity College for so kindly granting permission for the Garden Party to be held in the Provost's and Fellows' Garden of the College this afternoon.

Our thanks are also due to the Chairman and Directors of Guinness's Brewery for so kindly making arrangements for the visit on Saturday morning and for their hospitality in providing lunch for those who will be taking part in the visit.

My second word must be one of congratulation to Mr. Stephen Kelly, the President of the Royal Institute of the Architects of Ireland upon his election to the Fellowship of the Institute over which I have the honour to preside. This is no empty compliment, and it would give me great pleasure to have the opportunity of formally admitting him as a Fellow at Portland Place during his year of presidency.

I should like to welcome particularly the President of the Royal Society of Ulster Architects and Mr. Maynard Lyndon of Los Angeles who represents the American Institute of Architects.

The previous conferences were held here in 1931 and 1939, the first was presided over by Sir Banister Fletcher and the second jointly by Mr. J. J. Robinson and Mr. Goodhart-Rendel, for it was the year of the centenary of the Royal Institute of Ireland. Neither of our distinguished Past-Presidents is able to be present today, but they have charged me with conveying to their many friends their greetings, remembrances and good wishes.

Trinity College and the Bank of Ireland. From a line and wash drawing by Raymond McGrath, B.Arch. [*F*], reproduced in the Conference Handbook

Many of us will be meeting old friends. Those visiting Dublin for the first time will make new friends in a City famous for its hospitality. We who practise the same art have come here to discuss common problems. Let us strengthen these bonds of friendship and mutual understanding that together we may contribute something of lasting value in a troubled world.

The papers to be read at the Conference deal with subjects more practical than profound and we shall discuss the part we must play as architects to ensure the better education of the young and the more efficient care of the sick. In both these fields—in the building of schools and hospitals—there is great scope for our skill and much to be done, for we live in an age which decrees that advantages once the monopoly of a few must be brought within the reach of all. Reformers are impatient of delay, and though we may think the design of a school warrants as much care as the subjects taught in it, the keen educationalist will accept a surfeit of standardization if it ensures speed in building. There is therefore a danger that many architects will become merely agents for the erection of standardized prefabricated buildings constructed by methods quite alien to traditional and accepted practice. It was an artist, who, tired of the addled art of the modernists, said, 'Show me a Rembrandt that I may rinse my eyes'; and so, some of us, having gazed long at the blue prints of standardized buildings, being a little troubled by the setting aside of tradition, are glad to come to Dublin and stand in the squares built in the 'golden period of architecture' that we too may rinse our eyes, and have time to clear our thoughts.

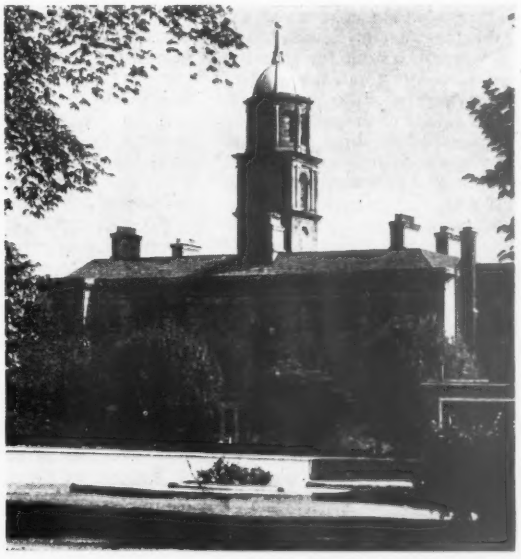
And when we have benefited by the process we may pause to ask the question: What is the trend of Architecture today? This annual Conference is hardly the occasion to provoke controversy though I understand cause for argument is not looked upon with disfavour here by those who uphold the right of individual expression. And so when we meet together we may have time to discuss the question I have asked, for it is of importance to the profession and indeed to the world at large.

The limitations placed upon our work may have considerable effect upon the future of craftsmanship and the passing of the skill of the craftsman from one generation to another. More than once an Art has declined when it became debased by over-embellishment. Today, some will say our Art is being purified for we build in the main without embellishing our structures with the arts of other crafts. There is little work for the carvers in wood or stone and posterity will often look in vain for examples of their craft in association with our work erected in a period which may be held unique in the quantity if not in the quality of a building. Simplicity in design is being forced upon us of necessity—if not by desire. One school of thought looks with disfavour at the architectural clothing of the constructional members of a building. Fortunately we have withstood the wave of modernism which has affected other of the Arts, particularly painting, the reason for which is not difficult to determine. But the conditions under which we are working will compel us to seek novelty in design and construction and thus out of our difficulty we may advance a stage in the gradual evolution which denotes real progress. But when we are troubled we may profit if we remember the words of the artist I quoted earlier, 'Show me a Rembrandt'. Something of quality that always satisfies.

It is not my intention to take more of your time, but I must reiterate our very sincere thanks to our brothers of the Royal Institute of the Architects of Ireland for inviting us to hold our Conference here and to all who have helped to ensure its success. It may be more than a coincidence that the last conference before the great world upheaval and the first after it should take place here amidst friends so hospitable and understanding and surroundings so pleasant.

Above: A drawing from the Conference Handbook by Raymond McGrath, [*F*]. Below: Assembling for the Conference photograph: L. to R.: the Vice-Provost of Trinity College; Lady Keay; the President, R.I.B.A.; Mr. Stephen Kelly [*F*], President, R.I.A.I.; Mrs. Kelly; Mr. R. H. Gibson [*F*], President, R.S.U.A.; Mrs. Gibson. Right column: Mr. Vincent Kelly [*F*] and the Lord Mayor of Dublin; the President and the Lady Mayoress; Mr. Stephen Kelly and Mr. C. D. Spragg, Secretary, R.I.B.A. Photographs taken at the garden party in the Provost's and Fellows' Garden of Trinity College

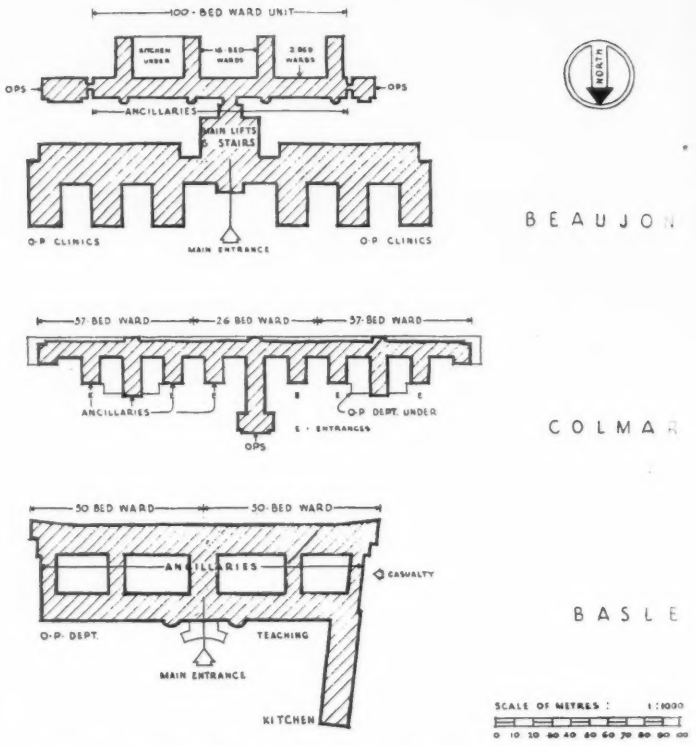
Above: Pencil sketch of James Gandon's Customs House, made at the Conference by Philip H. Cundall [*A*]. Below: Saint Kevin's Church, in the ruins of Glendalough, a monastic settlement dating from the 6th century, and the Rotunda Hospital (*c.* 1750) by Richard Cassells. The photographs are from the Conference Handbook and are by Richard Deegan. All three buildings were visited in the Conference tours.



Recent Trends in Hospital Design

by J. Murray Easton [*F*]
and S. E. T. Cusdin, O.B.E. [*A*]

Read by Mr. S. E. T. Cusdin, at the Architects' Conference, Dublin, 12 June 1947. The President in the Chair



Comparative block plans of the three hospitals principally discussed

WE HOPE that the title of this paper indicates our awareness of the fact that the whole subject of hospital design could hardly be compressed into some odd forty minutes. 'Recent' is fairly definite, except to geologists on the one hand, and fashion experts on the other, but 'trends' are more personal, and what we may consider a trend you may call a cul-de-sac or worse. The available material accumulated even in the short and troubled ten years of our survey is more than ample. Only a sample here and there can be picked out for examination, and we have withstood, not without a struggle, the temptation to explore the more sociological side of the problem.

Those diagrams which show the proper relation of hospitals, polyclinics, sanatoria, euthanasia stations and crematoria, were hard to resist and, even more so, were statistics of hospitalization, illustrated by little figures, representing respectively 1,000 patients, 500 nurses, 50 doctors, and one Minister of Health. But hardest of all to forego was the grand finale—the slashing attack on the architectural and medical profession and the impressionist picture of the future ship of Health with a psychiatrist at the prow, and a dietitian at the helm. All these we forewent in favour of a humdrum description of a few recently built hospitals, and an attempt to discover what light they shed on the problem of hospital planning at the present moment and in the near future.

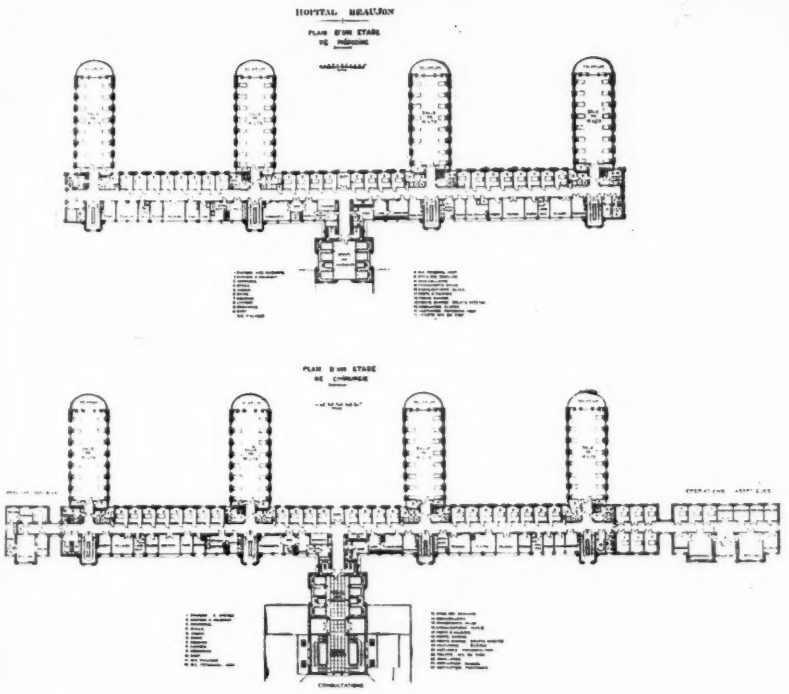
The urgency of the need to make up our minds on what we should aim at arises primarily from the now almost universal recognition of a national duty to provide the best preventive and curative treatment for all who need it, and directly from recent health legislation with its consequent programme of hospital construction. Some of our medical colleagues have hinted that if only architects would reduce the expectation of life of their buildings from 100 to 25 years a corresponding saving in structural costs could be effected, thus enabling bigger and better hospitals to be built sooner and cheaper, and rebuilt oftener. If there is a flaw in this reasoning it may be up to architects to ask the medical and nursing professions to consider whether their entirely laudable desire for perfection may not have the result of postponing the achievement of all-round adequacy.

To such consideration there is no better approach than an examination of what has been done in other countries and what theories have been put forward by foreign practitioners. No under-estimate of British or Irish achievement in hospital design is implied thereby, for even if the building of permanent hospitals in these islands had not been interrupted since 1939 it would still have been valuable to draw comparisons. So we propose briefly to discuss three continental hospitals which we have seen, contrast them with others (most of which we have examined only on paper), and finally try to draw some conclusions from these investigations.

The three hospitals referred to are: The Hospital Beaujon at Clichy, Paris, by Jean Walter; the Louis Pasteur at Colmar, Alsace, by M. Wetter; the new Burgerspital at Basle, Switzerland, by Vischer, Baur and Durig. They were chosen because all were of recent date and because each, while of comparable size, illustrated a different type of plan.

Beaujon consists of a spine on an east-west axis from which project four long wards (16-bed) on north-south axes. On the south side of the spine block are single-bed wards; on the other side of the connecting corridor are placed the ward ancillary rooms. At Colmar the same long spine exists, but here on the other hand the ward ancillary rooms project in wings facing north, while the wards themselves are ranged in a practically unbroken line on the south side of the corridor. At Basle both wards and ancillaries are contained within the long rectangular spine; thus the south or ward side resembles Colmar, and the north or ancillary side resembles Beaujon.

It is obvious that in ward blocks like Beaujon and Basle, where the ancillary rooms are ranged in a single line on the north side of the corridor, their extent must be strictly regulated by the spread of the wards on the south side, or to put it in another way, the spread of the wards must be so adjusted as to provide sufficient ancillaries. At Basle the great spread of the wards permits of ample ancillary rooms plus a spacious lighting and ventilating bay



The Hospital Beaujon at Clichy, Paris, by Jean Walter, has four ward wings, with north-south axes, on 12 storeys. The out-patients' department is in low buildings to the north. Above are air views. Below: plans of typical storeys of the ward and services block. The total in-patient accommodation is 1,100

in the middle of each ward unit, but at Beaujon with its more concentrated wards the ancillaries take up all the space and the corridor is lit only at the ends and not even so in the lower floors where other buildings abut.

The system adopted at Colmar, i.e. of housing the ancillaries in projecting wings, provides ample—possibly even excessive—lighting and ventilation to the corridor and a much greater degree of flexibility in the provision of ancillaries. The wings containing these can be lengthened or shortened to suit the needs of the various departments.

In all three hospitals the horizontal circulation on upper floors consists of a long straight corridor quite uninterrupted in the case of Beaujon, divided only by doors from the central hall in the case of Basle, but, at Colmar, cut into sections by partitions on some floors. Entrances and horizontal circulation are very different in each case. Complete centralization is achieved at Beaujon. Entrances are at different levels, but at the same plan point, and all lifts (except service lifts) are concentrated there. At Basle there is also a central entrance and main lift hall, but there are two subsidiary lift halls which serve other entrances. At Colmar there are no less than six entrances, each with its own lift and staircase to serve the horizontally, as well as vertically, divided sections.

Finally, there are in each example radical differences in the relationship between the various departments which comprise a hospital. At Beaujon and Basle the out-patients' department forms a separate group more or less linked to the main ward block, while at Colmar these are provided on the ground floor and basement of the main ward block.

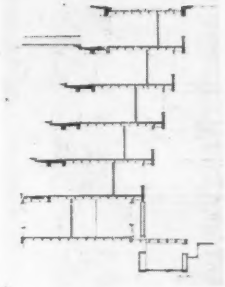
The main kitchen is outside the ward block at Basle and Colmar; in the basement at Beaujon. Administration is widely separated at Colmar, housed in the main ward block at Beaujon, and in the out-patients' block at Basle.

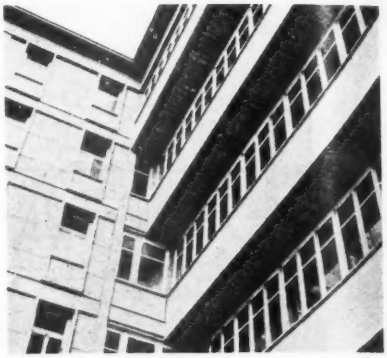
Some of the differences above mentioned may have arisen from site considerations. Colmar has a more ample area than Basle, and still more so than Beaujon. But the essentially determining factors are clearly ideas and intentions rather than the limitations imposed by outward circumstances. Other and more complicated plan forms can be related to these types, but some of the basic principles embodied in these three designs apply to nearly all hospitals.

The Hospital Beaujon at Clichy, Paris

Beaujon, though it represents only the 'tadpole' stage of M. Walter's ideal, is interesting because it exemplifies his theories of centralization combined with separation of services and circulation. It comprises a basement and ground floor with twelve storeys over. The topmost is reserved for lift machinery and services, the tenth and eleventh for tuberculosis (100 beds), and the ninth for Ear, Nose, Throat and Eye cases (27 beds each). Below that are four floors of medical cases (352 beds), three floors of surgical cases (282 beds), each floor of the last-mentioned being equipped with an operating block at either end. The east block provides a septic theatre with the usual ancillary rooms plus a two-bed recovery ward. The west block has twin operating theatres and three single-bed recovery wards. The first floor and part of the ground floor take maternity cases, and the remainder of the ground floor venereal cases, male and female. The total number of in-patient beds is 1,100.

To the north of the main hospital block lies the out-patients department consisting of two wings—one on either side of the main entrance. Each consists of a rectangular block parallel to the main block and separated from it by a courtyard about 78 ft. wide. Each of these rectangular blocks has three projecting wings. There are entrances at the end of each wing, and





The Hospital Louis Pasteur at Colmar, Alsace, by M. Wetter. Each successive storey is set back from north to south (see section) creating terraces on the south side and overhangs on the north. In- and out-patients are all located in the central building, the total beds being 732. Buildings for personnel are round the north side of the court. Above: a general view and the section. Right: the south and north sides of the main block

between them—10 in all—giving in most cases separate access to 11 consultative departments plus a casualty section.

(1) *Circulations.* The projecting wing housing lifts and staircases which connects the in-patient and out-patient blocks is an ingenious piece of planning. Entrance is at two levels—at ground floor level by a double ascending ramp for patients in ambulances or walking, at basement level by an easy flight of steps for visitors, and by a double descending ramp for wheeled traffic—doctors' cars, and kitchen and stores delivery. The last-mentioned gain access to the courtyards previously mentioned. Doctors and visitors to upper storeys proceed by the passenger lifts. Visitors to the lower storeys use the staircases.

At ground floor level patients enter a large hall which leads to the staircase and lift hall. On the right and left are placed the admission and administrative departments, also entrances to the two wings of the O.P. departments and to almoner's quarters. The battery of lifts consists of six bed and two passenger lifts. Concentrated in this way they provide a most satisfactory service far more effective than an equal number of lifts in scattered positions. The administrative department is very small for a hospital of this size, and excludes the possibility of a central records department.

(2) *The wards.* Each floor, with one or two exceptions, is a complete nursing unit controlled by one head sister whose office is placed in the centre opposite to the entrance corridor. She is equipped with an external telephone, a private automatic exchange telephone (dialling) and direct push-button telephone to each ward. She controls no less than 94 beds in the case of the surgical units (somewhat fewer on other floors), and would seem to correspond rather to a floor matron than to a ward sister as we understand the term.

(3) *The Ancillaries.* Owing to the size of the ward unit it has been possible to include a very complete range of ancillary rooms. There are four sets of sink, bath and lavatory rooms and four day rooms, but only one kitchen. Each floor has its doctor's room with laboratories adjacent, and also an X-ray Department.

(4) *Services.* The main kitchen in the basement is almost directly under the ward kitchens on each floor. Hence it has been deemed unnecessary to provide heated trolleys. The food containers are loaded on to the open trolleys and ascend by a battery of four lifts which serve directly into each kitchen. Another battery of three service lifts connects the main pharmacy in the basement with a distributing pharmacy on each floor.

(5) *Annexes.* The annexes to the main hospital include boiler house, works department and mortuary, a creche, residences for various officials, nurses' home, and staff home. The total number of resident staff is about 200—male and female—about one-third of the total personnel.

The Hospital Louis Pasteur at Colmar, Alsace

The site is ample (about 37 acres), and the total number of beds provided (in seven storeys including basement) is 732. The plan of this hospital has already been indicated, and on it is based a special arrangement of section. Each successive storey is set back from south to north, creating on the south side a series of terraces in front of the wards, and on the north a corresponding series of overhung storeys.

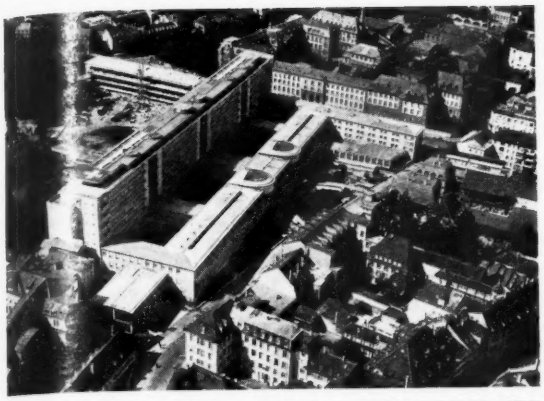
This overhang is rendered possible by the projecting wings which act as buttresses and take the ends of the beams which, without other vertical support, carry the corridors. The distance between the wings is some 35 ft. The wings become slightly shortened as they rise by the advancing corridors, and the ancillary rooms are consequently reduced, but this gives some degree of flexibility and seems to work well enough. The major question is whether this ingenious design with all the complications and expense which it must entail is justified by the result.

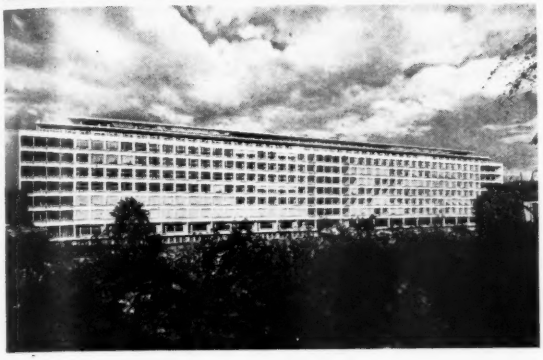
With the exception of their small departments in- and out-patients are all located in the central building and all the sections related to personnel are linked together and form a band round the north, north-east and north-west sides of the site. This band is pierced on the centre line of the main hospital block to provide a very dignified entrance to a fine forecourt.

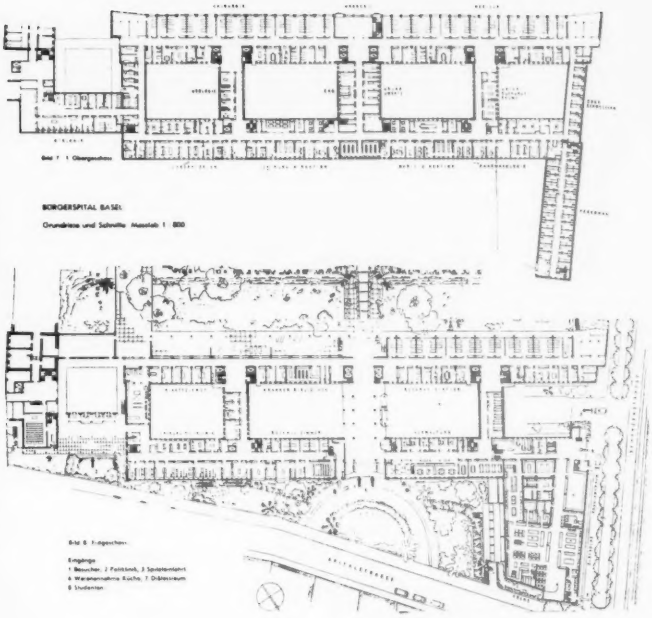
(1) *Out-patients' and Special Departments.* These are located in the basement and on the ground floor. Radiology, Pharmacy and Central Sterilization, Baths and Hydrotherapy in the former, Maternity, Ante-Natal, Isolation, General Out-Patients, Neurology and Laboratories on the latter floor. At this (ground floor) level the building is in fact a series of separate blocks strung along a partly open gallery running from east to west and subdivided by two cross roads running north and south.

(2) *Wards.* The length of the whole block is of the order of 900 ft. as against Beaujon's 500 ft., and vertical divisions were obviously called for, but even so it is difficult to see why the staircase and lift halls could not have been reduced in number to provide a more efficient service. The wards themselves are of 3-bed width on first, second and third floors, and of 2-bed width on fourth and fifth floors. They contain eight, four, two or one beds. The ward units vary from 38 beds in the case of medicine, to 29 in surgery. The elaborate system of set back terraces certainly produces excellent sun decks, but they were very little in use on the occasion of our visit (July). Indeed, many rooms had blinds partly drawn, and only a small amount of windows open.

(3) *Ancillaries.* The arrangement of the ancillaries in separate blocks has much to commend it, and those at Colmar are well planned and adequate. Two sanitary groups are provided in each ward unit, consisting of lavatory, bath and sink rooms. The three operating theatres—a twin suite on







The New Burgerspital, Basle, by Vischer, Baur and Durig is a large extension to an existing hospital. The main block of seven storeys provides 697 beds, the east wing being surgical and the west wing medical. The lower north block houses out-patients, administration, operating suites, teaching, etc. Top left: air view. Below: the south side which looks over a garden. Above: plans of the extension

the first floor and a single theatre for septic cases on the second floor—appear to us to be inadequate.

(4) *Services.* The main kitchen forms part of the outer group of buildings, but is connected by a sunk corridor to the basement of the hospital proper. Insulated containers with meals sufficient for either 9 or 18 persons are prepared in the kitchen, loaded on large trolleys, and taken out and placed in the service lifts which communicate direct with the ward kitchens. There the contents are transferred to dishes previously warmed, and so to the patients. All the ward containers come from and, after use, are replaced in special cabinets which descend to the central wash up, are mechanically cleaned there and returned to the wards without being manhandled. The kitchens themselves seem admirably laid out, as does this whole section, comprising boiler house, kitchen and laundry.

(5) *Annexes.* The chain of buildings which bound the northern parts of the site—reading from east to west—comprise (*a*) the boiler house, laundry, kitchen group; (*b*) home for male and female personnel; (*c*) administration; (*d*) midwives' quarters and school; (*e*) sisters' home; (*f*) mortuary and laboratories; and (*g*) school for probationer nurses. As in most French hospitals the number of resident staff (as of total staff) seems relatively small, but the accommodation provided is very satisfactory.

The New Burgerspital at Basle, Switzerland

Unlike the two hospitals previously described, the new hospital at Basle is an extension to the older buildings of an ancient foundation. But it is to so large an extent a separate and complete hospital that it is fully comparable to the others.

The new hospital block, a little over 500 ft. in length, faces south over a garden which, though still in process of being laid out, promises to be excellent. To the north, facing the street, is a parallel but comparatively low block connected with the main structure by wings which at lower ground floor level are carried over the intervening courtyard as bridges.

The principal block has seven storeys of wards over the ground floor, a lower ground floor and a basement. It provides 671 beds plus 26 isolation beds. These are arranged as follows: On the seventh floor, single-bed wards for private patients (first class); on the sixth floor, 2-bed wards for private patients (second class). The lower storeys have wards three beds in depth.

On all floors the east wing is for surgical, the west wing for medical, cases. The north block with its connecting wings houses the out-patients' departments, administration, operating suites, teaching, etc. Other wings at the west end contain respectively kitchen and domestic staff and infectious diseases.

(1) *Circulations.* The principal circulations are as follows: Visitors arrive at the main entrance from a semi-circular drive leading from the Spitalstrasse. On the right-hand (north block) is found the administrative department. A spacious entrance hall enlivened by green and flowering plants extends right through to the main ward block at which point there is a staircase and lift hall (six lifts) giving on to the garden. At the west end of the site another street runs at right angles to the Spitalstrasse and there, at a lower level, is a wide entrance to the courtyard between the two blocks. Under the bridges formed by the connecting wings are provided the patients' entrances to the central and to the two side lift halls of the hospital block. On the north side are entrances to the casualty and other departments. All ambulances use this approach by courtyard, which is some 70 ft. in width. In the last-mentioned street is also found the entrance to kitchen and stores department, and at the east end of the north block the entrance to the polyclinic (O.P. Department) is placed.

The previously mentioned north-south wings act as connections between the main block and the north block. The latter contains, on the first floor, laboratories, medical and surgical directors' departments and pharmacology, and on the second floor, operating theatres, teaching and more laboratories. The basement corridor acts as general circulation for food, supplies, removal of the dead, etc.

(2) *The wards.* The typical ward arrangement on each side of the central hall is as follows:

The 50 beds which it comprises are divided into three units of 16 beds plus a special 2-bed ward. Each of those units has two 6-bed and two 2-bed wards with pass doors between them, as well as doors from the corridor. As nursing units they are separate, but all the 50 beds are served by one group of ancillaries.

These rooms are just over 25 ft. in depth, and to ensure good daylight at such a depth, balconies are dispensed with. Natural light—at least in summer—is very good, and on the back wall of the rooms are placed lavatory basins, cupboards, etc. Most of the wall surfaces, including corridors, are covered with 'Salubra' washable wallpaper in light colours, and the effect is most cheerful and somewhat less hard than the usual glossy oil paint or distemper. The floors are laid with heavy linoleum with a coved finish to the walls, except round the lavatory basins where there are tiled areas. The most careful and sympathetic consideration has been given to all details, from the windows with their easily adjustable blinds and double glazing, to the doors of special soundproof pattern. The lighting, signalling and wireless arrangements are very good and include low level lights for night use, and an ingeniously designed lamp for the centre table, of which the shade is made of metal slats so arranged that there is a faint glow on the exterior but that the full light is concentrated on the table itself. The private 2-bed and single-bed wards differ only in that they are more spacious and that the latter, being set back from the main wall face, have a terrace in front of them.

(3) *The Ancillaries.* Particularly spacious day rooms are provided facing south, with a covered balcony produced by setting back the window wall.

Ancillaries proper cover an area of about 170 ft. by 19 ft., exclusive of lighting bays and two north-facing isolation wards (1-bed). Besides the usual kitchens, bath, lavatory and sink room accommodation (the last group in duplicate) there is a large treatment room, a sisters' office, and a nurses' dining-room. Lockers for patients' clothes are recessed into the north wall of the corridor.

The lifts special to, and in the centre of, each unit, are two bed lifts, three food lifts which discharge directly into the kitchens, and one 'dirty' lift. In addition the four bed and two personnel lifts of the main entrance hall are shared by each pair of units.

The first-mentioned bed lifts give directly into the corridor of the connecting wings and enable patients to be taken down to the teaching departments of the north block and, on the surgical side, to the operating suites. These consist of a double and a single theatre for ordinary operations, a septic theatre, one for neural cases and one for operative radiology. Sterilizing and scrub-up rooms are arranged between the theatres, but the anæsthetising rooms are on the other side of the corridor—an arrangement of doubtful appropriateness, which in fact the surgeons criticized.

(4) *Services.* The hospital is fortunately able to dispense with boiler houses and smoke stack, for steam is provided from the city destructor plant some distance away. Heating is by low temperature radiation from ceiling panels, which is something of a novelty in Switzerland.

It is interesting to note that the pipes which comprise the heating panels serve the double purpose of conduits and floor reinforcements—an economy not permitted by our building laws.

The kitchen department is spacious and well lit, in level intermediate between ground floor and lower ground floor. It is connected to the circulating corridors in the basement by a fairly steep ramp. The loaded food trolleys are coupled up like the carriages of a train to an electric tractor which takes them with alarming speed to the ward kitchen lifts. One electrically heated and insulated trolley contains the food for one unit of 50 beds. Smaller trolleys take the food containers to the wards—one trolley to each 16-bed unit.

(5) *Out-Patients' Department.* The entrance to this is at ground floor level, but except for the surgical section and part of casualty most of it is at lower ground floor level.

Radiology, both diagnostic and therapeutic, occupies the eastern half of the main ward block; physiotherapy the western half, and each of these sections is further sub-divided for men and women. Each sub-section has its own waiting rooms. The somewhat sharp separation between radiotherapy and physiotherapy seems open to criticism, since it is common for patients to require both kinds of treatment in immediate succession. But again the fitting up of the rooms and the apparatus seemed all that could be wished. In the north block at the same level is the major part of the casualty department, with its entrance well away from any public or patients' entrance.

Certain difficulties are inherent in the planning of an out-patient department formed in the lower storeys of a main ward block, as compared with the greater flexibility which a one-storey building permits. With the central corridor in the former, undesirable circulations are possible.

None the less, under what we understand to be an appointment system to a large extent at least, the arrangements appear to work smoothly. Perhaps the Swiss are more easily controllable than some other peoples and refrain from entering into treatment rooms opening directly off main corridors, as they might very readily do.

(6) *Teaching Department.* This occupies the centre part of the north block, and includes the two curiously projected circular bays which at second floor level flank the main entrance. These provide the extra depth necessary for two large lecture rooms—medical and surgical. Both have tiered seating with projection, patients' preparation rooms, etc. Between them lies a large students' hall, provided with chairs and tables. This is flanked on the north side by a smaller lecture room and two study rooms.

(7) *Annexes.* The nurses' home remains to be built, but the maids' home had been constructed over the kitchen wing, and the infectious diseases block occupies a corresponding block to the south. Ultimately the adjacent old buildings will be remodelled or rebuilt to provide a complete hospital with maternity and children's sections, etc.

(8) *Construction.* Reinforced concrete is used for walls, columns, floors and roofs, but the raw appearance and the cracking and crazing so frequently associated with that medium have been avoided. Most of the surfaces are rendered in various light tones and with a perfection of craftsmanship which we must envy. By these variations in colour and by the use of other materials—stone, marble, terrazzo, etc.—the exterior has been made as gay and attractive as its somewhat monotonous form permits. The finishes to the roofs and copings are most thoroughly considered from the point of view of weather-tightness and appearance.

Inside, flat ceilings free from deep beams have been achieved nearly everywhere by ingenious construction; and here again the finishes are attractively varied in character and admirable in finish. Plants and flowers play a great part in the general appearance of cheerfulness.

Conclusions

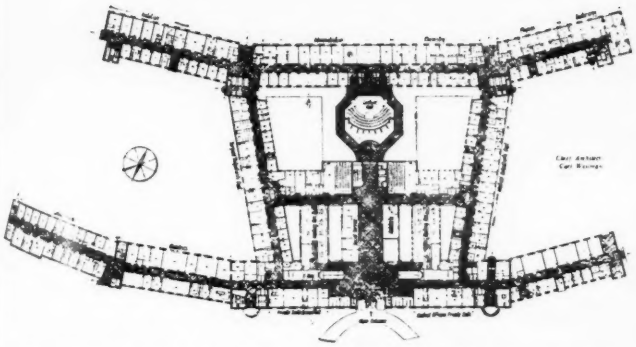
It is clear that the broadly rectangular form of main ward block illustrated in the three examples cannot be applied to very large hospitals without risk of producing buildings which are intimidating in their effect. At Basle, it has taken all the resources of architectural skill and perfect craftsmanship to avoid it: Colmar is definitely too long, and Beaujon is overwhelming. In a city of skyscrapers like New York great height may offset some of these drawbacks, but brings others in its train.

At Lille, at Ankara, and in a study for a Medical Centre for a town of 750,000 inhabitants, Jean Walter has adopted a plan which in its crystalline precision sets at naught some long-held traditions—aspect and the sanctity of the ward unit in particular. This is a functional and mechanistic rather than a humanist approach to a problem which has been tackled at Zurich (in the new Kantonspital) and at Stockholm in another way.

Thus, at Stockholm, Carl Westman, the architect of the Karolinska hospital, has used every resource to de-formalize what is in essence a pair of parallel blocks joined by an H-shaped link. The latter contains all the consultation, diagnostic and treatment departments, and the staircase halls which give access to the ward units. All the ancillary buildings have been disposed with skilful informality along natural contours, and a remarkable avoidance of institutional character has been achieved.

This raises an interesting question—should institutions look institutional? A thousand-bed hospital is some institution whether it wants to be or not. With the best will in the world it cannot look like a group of 18th-century almshouses. Should we mitigate this or not? Mr. Moser and his partners at Zurich, and Mr. Westman at Stockholm, say 'Yes', and Mr. Walter says 'No.' So also does Mr. Cederstrom, the engineer-architect of the Sodersjukhuset (hereinafter to be known as the South Hospital) at Stockholm.

This vast structure, which contains 1,200 beds, looks every inch its size. The plan somewhat resembles that of Basle in the placing of the polyclinics, operating



The Karolinska hospital, Stockholm, by Carl Westman, although a very large building, successfully avoids an institutional character. On the right are views of a ward wing, of a six-bed ward and of a solarium

theatres, etc. in a lower building to the north. Mr. Cederstrom is a master of standardization in hospital organization and planning, and the South Hospital reflects this mastery. Whether you like it or not perhaps depends on whether your attitude is that of a 20th century termite or 19th century individualist earthworm.

In smaller hospitals this problem becomes less acute. Messrs. Stephenson and Turner's Royal Melbourne Hospital* (540 beds) is based on a theme somewhat similar to that of the South Hospital, but its size brings it into a more human scale, and its expert planning places it in the highest grade of international hospital design.

The Ward Unit. In none of these hospitals, with the exception of Beaujon, does the large open ward, with its 20 or more beds at right angles to the window walls, survive. The bed parallel to the window has won, and the larger wards have either four or six, or else, as at Melbourne, bays separated by glass screens, each of four beds.

What is not so well established is the additional accommodation required for the nursing, diagnostic, and treatment facilities in the ward unit. The Nursing Council of Great Britain has published a full and concise description of what, in its opinion, the unit should consist of both as to the number of beds and the ancillaries. Twenty-five beds is the maximum recommended, and for this there is a list of ancillaries formidable in size and number. Each unit is, of course, the domain of one sister. At Beaujon it will be remembered there were no less than 94 beds in the largest type of unit with one complete set of ancillaries, some parts of which are multiplied. At Colmar the largest unit is 38 beds, and at Basle, 50 sub-divided into three but again with one set of ancillaries. In America the average quoted by Isador Rosenfield in his new book on hospital design is 50. Two of the newest hospitals there have 44 and 46 bed units. It is obvious that these large units permit, without extravagance, a much fuller and varied set of ancillaries than does the small unit recommended in England. Laboratories and doctors' rooms can be included.

* See Front Cover Illustration.

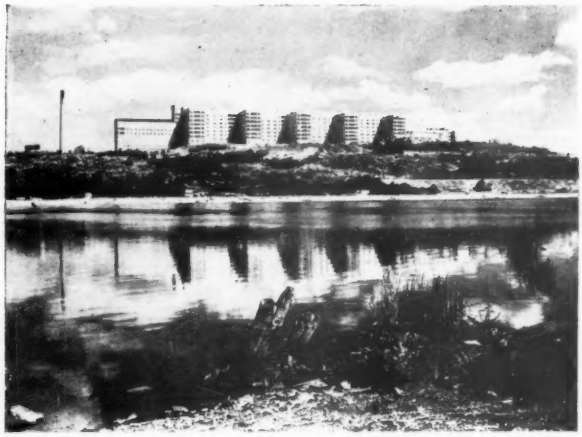
These are matters which the architect cannot decide, but obviously they have a great effect on planning and on cost. Mr. Walter, for example, claims that in his latest design phenomenal reductions have been achieved in the ratio of space occupied by ancillaries and corridors to actual ward space notwithstanding that a sluice room, bath and lavatory are provided for each 12 patients. The totally centralized lift service as at Beaujon would be impossible in a hospital of similar size in England; nor would it be possible to provide adequate ancillaries in a single row of rooms on the north side of the corridor. Some adaptation of the Colmar principle of projecting ancillary blocks would have to be resorted to unless the ward unit were strung out to great length by the provision of many single-bed wards. This question of the size of the ward unit is one which deserves the closest scrutiny in the interests of economy. We are well aware that the question is bound up with that of the existing system of probationer nurse use and training, and that factors of running costs have to be carefully balanced against those of structure and fittings. But as tax-payers as well as architects we have reason to put this question.

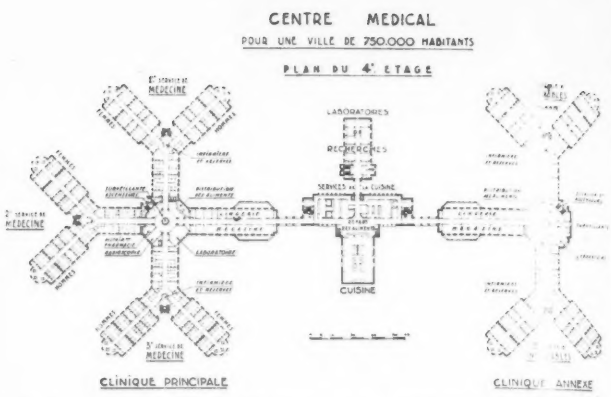
Aspect. Aspect, especially in regard to wards, has always taken a predominant part in the disposition of hospital buildings. That wards should face due south, or perhaps a little east, or a little west of south, has tended to become axiomatic. Mr. Jean Walter in his book *Renaissance 'L' Architecture Medicale* has derided this theory. He claims that with good light and modern methods of heating and ventilation it does not matter which way the wards face. We think there is a certain amount of truth in his contention.

Many hospitals have been rendered inconvenient by the insistence on having all wards facing south and all operating theatres facing [north,' but we cannot believe that in a climate like ours it is reasonable to discard the opportunity, when it exists, of getting sunshine into wards. But other factors such as general convenience, good views, etc., should be given equal consideration with that of south aspect; and an open horizon, be it

north, south, east or west, is preferable to one which is seriously obstructed by intervening buildings.

Vertical Planning and Concentration. In all the examples shown there has been a full acceptance of the principle of vertical planning of the large hospital blocks, and in general of putting like over like. Thus ward units may be superimposed to any reasonable extent, as may nurses' and staff bedrooms. Two or three or more storeys of operating theatre suites present no difficulties, but the out-patients' departments are generally more easily handled on one floor. Similarly kitchen, boiler house, laundry, etc., are in many ways more satisfactory as separate blocks, but here we come up against the contrary principle—concentration and the principle of the centralization of vertical circulation for the main hospital and service traffic. Jean Walter's study for a medical centre provides a centralized vertical circulation as do Melbourne and Beaujon. Decentralized circulations are found at Colmar and the





Left: the Sodersjukhuset (South Hospital) at Stockholm, by Cederstrom. Above: plans of the medical centre at Ankara (750,000 inhabitants), by Jean Walter

Karolinska, and duplicate vertical circulations at Basle and at the South Hospital.

Bound up in this is the vital aspect of the detailed planning and size of the ward unit, the amount of site available for the hospital as a whole, and particularly nowadays, that of economy. The choice between these solutions must inevitably arise from a judgement based on knowledge of the conditions of the site, size, and proposed organization of the hospital.

Sizes and Types. The last-mentioned includes the important distinction between teaching and non-teaching hospitals, and in the case of teaching hospitals whether pre-clinical studies have to be provided for or whether, as in the case of hospitals in a university town, they already exist.

Obviously the teaching hospital must include the fullest possible range of departments of a size appropriate to the region for which it caters. This may imply a very large hospital indeed, and the question then arises—should there be some degree of decentralization? Where conditions permit of the establishment of specialist hospitals of a fair size, say, 100–200 beds, for cases such as maternity, children, psychiatry, etc., surely the flexibility in planning and the *esprit-de-corps* thus gained, as well as the reduction in size of the central group, is worth considering?

By the same token we would like to quote the opinion of the matron of a large hospital in Northern Ireland on the subject of nurses' homes. These should be, she considers, like the houses of a public school rather than like a huge second-class hotel. They could have certain accommodation in common dining, recreation rooms, etc. This she has tried on a small scale, and is delighted with it, but not with the architects of her hospital who have had regretfully to turn down her suggestion on the ground of the spacial inadequacy of the grounds.

Having invoked a living matron, let us now quote one who is no longer alive but whose name is forever associated with hospitals. These are her words: 'Want of simplicity of construction in not a few hospitals is destructive to discipline. Effective and easy supervision is essential to proper care and nursing; and everyone knows that a patient may often be saved by careful nursing when everything else will fail. It is on this point that the hospital architect may either facilitate or prevent recovery to the extent to which his plan renders nursing easy or the reverse. Every un-needed closet, scullery, lobby and staircase represents both a place which must be cleaned; which must take hands and time to clean; and a hiding or skulking place for patients or servants disposed to do so, and of which no hospital will ever be free. Every few minutes wasted upon cleaning what had better not have been there to be cleaned is something taken from, and lost by, the sick.' These ageless and severe reminders come from Florence Nightingale, and with them we conclude this paper.

DISCUSSION

Mr. R. H. Gibson [*F*], President of the Royal Society of Ulster Architects, proposing a vote of thanks, said: This could be regarded as the age of conferences. In a particular city of which I happen to be a citizen a conference was held by a fishmongers' organization. They were welcomed as we were welcomed today, and the chairman, replying, advised the members to advertize, and said 'The success of the organization is wrapped up in the DAILY MAIL. The success of this Conference is going to be very largely wrapped up in Mr. Cusdin's paper. Those of us who are deeply interested in hospital design are very much indebted to him for the very fine analysis he has given in this paper. We know how much research work one has to do before one can begin real work. I congratulate him and I feel that he is carrying on the tradition of good hospital design which this country of ours has upheld for the past 50 years.'

Mr. G. Noel Hill [*F*] seconded the vote of thanks to the lecturer.

Mr. A. W. Kenyon [*F*] emphasized the importance of studying the comfort of the patients. Hospitals should not be built merely from the point of view of the doctors and the nursing staff.

Mr. F. C. Saxon [*F*] said he would like to hear something about the hospitals built in Ireland in recent years.

Mr. H. H. Hill [*F.R.I.A.I.*] said that large hospitals were very interesting from the architect's point of view, but he was inclined to doubt whether it was advisable to build very large hospitals. In his opinion it was a bad thing to assemble a thousand or more patients in one building.

Mr. Cusdin [*A*] agreed with the speakers that the basic approach to hospital planning must be from the patients' point of view. Unfortunately the accommodation, equipment, the specialized medical and nursing staffs now required for the treatment of patients was becoming so complicated that large hospitals were the only places which justified the initial expense and operational costs of such treatment. In the new hospital at Zurich, the Kantonspital, on which work had just commenced, an attempt had been made to reduce the size of the individual units to create a more friendly appearance. Large hospitals would be required to teach doctors and nurses; but there would also be a demand for the smaller hospitals. And it was to be hoped that patients in the future might have the opportunity of choosing for treatment of their sickness a large institution with every facility available or smaller buildings which would retain a more domestic atmosphere: in either case it was our duty as architects to make these the best of their types that our limited resources permitted.

The Conference Photograph

After the Inaugural Meeting at which the President delivered his address and Mr. Cusdin read the paper reported above, the members attended at Trinity College in the afternoon of 12 June for the Conference Photograph. This photograph is a panoramic group and is too wide for clear reproduction in the JOURNAL. Application for copies of the photograph can be made by members who are interested to the College Studios, 31 Westmoreland St., Dublin.

Modern School Buildings

by R. S. Wilshere [*F*], Education Architect, Belfast

Read at the Architects' Conference, Dublin, on 13 June 1947. The President in the Chair

THE BASIS of all education is tradition, not only by the passing of knowledge from one generation to the next generation, but also by the passing of the accumulated knowledge which each successive generation in its turn contributes. And so in giving a paper on 'Modern School Planning and Design' I make no apologies for first giving you a brief historical survey of ideas past schools have provided, and it may be that some moral may be drawn from past achievements in facing the future. I would suggest that the problem of designing a building for educational purposes involves the welding into one unit, three distinct and often very conflicting requirements—education, health and architecture. The balancing of these requirements is by no means an easy one.

At the beginning of the 19th century the standard type plan for a school building was known as 'The Lancastrian School'. It comprised a large room or hall with a raised platform at one end for the schoolmaster. Desks were placed in the centre and space left all round the desks for children to stand in groups whilst under instruction. A schoolmaster would have control of anything up to 1,000 pupils, his duties really being mostly supervision, the educational theory of those days being largely self instruction by the pupils themselves under monitors.

About 1826, teachers were introduced to assist the principal, and a new type of plan appears, usually called the Stowe System. This school provided:

1. A long gallery at one end of the room.
2. Desks arranged in groups at the sides.
3. Central space left clear.
4. One or more small classrooms with galleries.

In 1846—20 years later—the pupil teacher system was introduced and plans changed. Rooms became long and narrow with desks on one side of the room only, divided by curtains into groups each with its pupil teacher.

In 1870, the Elementary Education Act was passed in England and education for all became a public responsibility and School Boards were created to control education in their own districts. The London School Board at once held a competition for the ideal school building. The Ben Jonson school erected in Stepney in 1872 was the result of this competition. This plan was the famous 'central hall' type and comprised:

1. A large central assembly hall.
2. Separate classrooms grouped round this hall and generally opening direct from this hall.

The following new principles became established by this school:

1. All classrooms had left-hand lighting.
2. Each teacher had his own classroom.
3. The central hall became available for special purposes and was no longer used for ordinary class instruction.

For nearly 32 years this plan held the field unchallenged; practically every successful competition was based on this plan and as late as 1902 an eminent authority expressed the opinion that as a plan for school purposes it was unlikely it would be improved upon.

It was in 1902 a new Education Act introduced school medical services, and with it the appointment of school medical officers, which caused a complete revolution in school design. This was largely due to the energy and enthusiasm of two men—Dr. Reid, the School Medical Officer of Staffordshire, and Mr. Widdows, the Education Architect of Derbyshire.

The experiments of Haldane and Sir Leonard Hill had just thrown new light on the problem of ventilation, and had demonstrated ventilation as primarily a matter of air movement; chemically pure air was not of importance; cooling power and movement were the essentials. Dr. Reid saw that ventilation in the central hall was really little better than the back to back house, and with Mr. Hutchings, the Staffordshire Education Architect, evolved a new type of school called the 'Pavilion' type. It consisted of a row of classrooms connected by an open corridor, but with a definite scientific basis, ventilation of the classroom by windows opening on both sides of the room, each window having a hopper just above the level of the children's heads.

After some opposition, the Board of Education agreed to an experimental school being built, subject to each classroom having a ceiling outlet to a Boyle type ventilator. After further pressure the Board agreed to the omission of the ceiling ventilators except in one room, on condition these would be provided should the ventilation prove unsatisfactory. The experiment proved completely successful. The rooms were delightfully fresh and free from stuffiness, and it was found the roof ventilator made no difference at all.

Mr. Widdows developed the principle, and as sites in those days were restricted in area, produced some remarkable plans with classrooms jutting in all directions from the central hall, providing each classroom with bi-lateral lighting and cross ventilation. No doubt, the idea of the central hall still maintained its grip. This new principle of ventilation gradually replaced the central hall type, although many architects did not appear to really grasp the underlying principles, but cross ventilation was established and all classrooms tended to become what one might describe as one room thick.

After the somewhat complicated early plans of Mr. Widdows, there suddenly appeared the logical solution, the 'quadrangular plan" (1913), which soon became the standard for school design as the central hall type had been in its day. It has become fashionable to condemn the quadrangular plan chiefly because so many quadrangular school plans ignore aspect. Educationally, however, it makes a good working plan, particularly for the semi open-air type of school where it gives protection to the open-air corridors.

The semi open-air school was the result of the remarkable achievements with full open-air treatment of T.B., and undoubtedly provided very healthy conditions. It was in 1914 Mr. Widdows produced his Wingfield School. This school was designed on a definitely scientific basis dealing with:

1. Aspect.
2. Proper natural lighting.
3. Cross ventilation.
4. Open air conditions.
5. Heating.

Lighting was by means of 60 degrees continuous glazed north light. Fully opening glazed doors opened into open verandahs on each side of the classroom. The purpose was to eliminate sunlight with its excessive lighting contrasts and to rely on the even and steady north light. At the same time the glazed doors enabled the sunlight to be seen outside. Cross ventilation was by means of hoppers and heating was solved by under floor heating. Mr. Widdows claimed this classroom provided a steady light of 5 per cent of the cill lighting.

During the inter-war years, the break with traditional planning and design and the development of the asymmetrical plan has provided a valuable release enabling a more rational layout to be adopted so necessary to meet the growing requirements of education. The passing of the new Education Act, and the raising of the school leaving age, has still further widened the scope of education; not only have the type and variety of schools been increased, as will be seen from the new Building Regulations, but the whole standard of accommodation and equipment has become much more elaborate.

It will be seen in the earlier plans that methods of instruction directly shaped the plan; later health played a major part. Today educational methods are changing. In the past it may be said pupils were sent to school to be taught, today pupils attend a school to learn. The function of the teacher tends to become more and more that of a

Historical types of school plan

guide, philosopher and friend, rather than an instructor pushing definite ideas into their pupils. The pupil is less and less expected to accept what it is taught; the idea behind education becomes more and more to develop the pupils' individuality, but at the same time to make the pupils realize they are members of a community and to adjust their own individuality to the group with which they work. It calls for less regimentation and more freedom for the pupil and for more activity in place of book learning. This new approach is brought out in the new regulations.

It may be said that in the past schools were more or less static, that is, pupils had fixed places in a definite room and the architect's problem was largely to provide rooms to accommodate a given number of desks arranged in a set pattern, only to be moved when the floors had to be scrubbed. Today the classroom tends to become a centre of activity and mobility. Fixed furniture is being replaced by light movable furniture, which can be easily moved to provide different grouping and arrangements, or stacked on one side to leave the floor area clear.

The new regulations revert to the principle followed in the central hall type of school where classrooms of varying sizes were provided. This policy after the 1914-18 war created much difficulty when school accommodation, as today, was inadequate to meet urgent needs and lead to the general practice of all classrooms having the same capacity. The classroom still remains the hub of the pupils' education, and it is from this centre the pupils' activities radiate, but the increasing use of other rooms and facilities brings the matter of circulation not only by the pupils moving from place to place but also the staff and those in charge.

There has been an increasing tendency for schools to sprawl more and more. This sprawl has been justified on the grounds that 'as walking is good exercise this does not matter'. A better defence is that it gives a sense of space and freedom, a very desirable quality in any school building.

Today, compared with the past, the pressure of economy on expenditure may be said to have almost ceased to exercise any control, but the last two years have shown us that even if we have unlimited funds to spend this can produce another obstacle, the lack of sufficient labour and materials to meet our demands. The vast demands on the Building Industry envisaged today in every branch of the social services apart from the enormous arrears of normal requirements should be squarely faced.

This tendency to sprawl more and more means that, whereas in a school of the central hall type there are practically no corridors or unproductive areas, and in the average quadrangular school working space to corridors is in the neighbourhood of 2 to 1; in the type of plans now becoming fashionable these figures are revised, being as much as 1 to 2 or even more. This means there is obviously a large amount of building which is in effect unproductive, and I feel we should consider if we can reduce this.

Those who have seen the newer schools round Paris before the war must have been impressed by the sense of space they suggest, although actually they are relatively compact. This sense of space is largely achieved by the skill of the architect, and I would suggest the proper architectural approach is to secure these pleasing conditions by good æsthetic planning and design, as these French architects have done.

Building Regulations 1944

The Ministry of Education's 'Draft Building Regulations 1944' and 'The Regulations Prescribing Standards for School Premises 1944', lay down in very full detail the requirements that will have to be met in all the various types of new schools that will be erected.

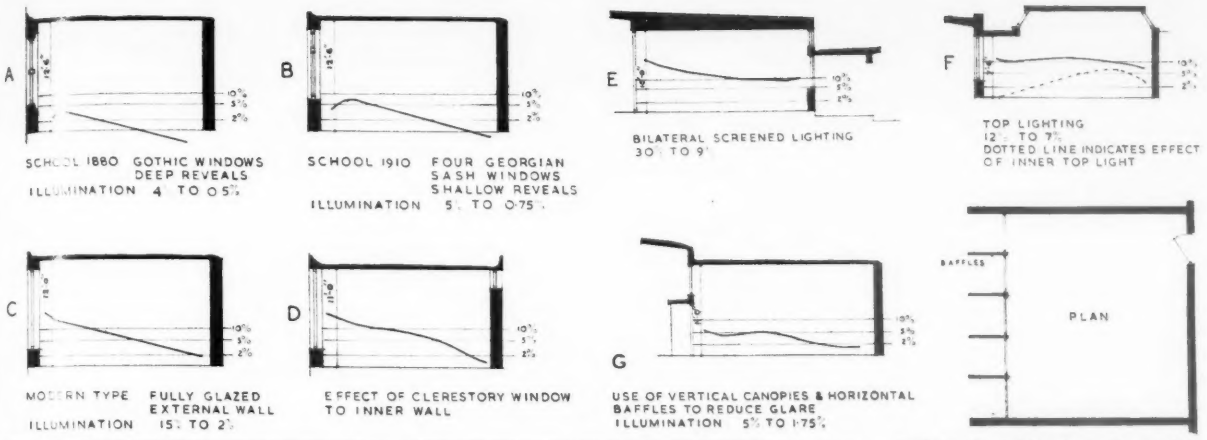
The greater variety of this accommodation and the varying sizes of classrooms add to the difficulties of planning new school buildings, and these difficulties are increased by the adoption of the various functional requirements, which are now being laid down in the Codes of Practice prepared under the authority of the Codes of Practice Committee. The Codes of Functional Requirements of buildings, to which reference will be necessary, cover Daylight, Sunlight, Ventilation, Space and Circulation, Noise, Fire, Weather Precautions, Services, Water Supply, etc., Heating and Heat Insulation, Corrosion, Dirt and Vermin, Acoustics, and these codes will have to be followed where applicable.

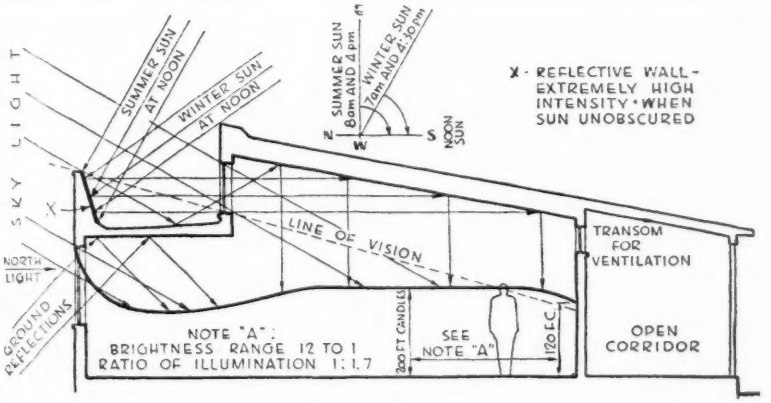
It is not possible to deal with all the new requirements in detail. In the new regulations school meals now become an essential feature of all schools whatever their size. Gymnasium and changing facilities become of more importance. But the assembly hall, the importance of which for dramatic and other purposes has been increasing and the importance of which for outside purposes—until the building situation eases—are very extensive, appears to receive no special consideration that one might expect. The planning of schools will, however, be dominated even more in the future by the so-called functional requirements, and I propose to deal with the more important of these.

Daylighting

The factor which affects lighting and seeing is not only the amount of illumination but the quality of lighting, whether natural or artificial. The important effects in seeing conditions, both psychological and physiological are glare, diffusion and direction, composition and distribution.

The first practical approach to lighting of classrooms was the introduction of left-hand lighting. The investigation by the N.I. of I.P. carried out in 1931 dealt largely with the influence of lighting conditions on the pupil's work. These investigations showed the rapid diminution of daylight the farther the pupil is seated from the win-





Above: daylight intensities in various classroom sections. Left: an American design of classroom lit with reflected daylight

dow, and that the quantity of light affected the quality of work.

Daylighting in buildings, and particularly schools, has as a result now received considerable attention, and the Post-War Building Studies, 'The Lighting of Buildings,' deals extensively with this problem in relation to schools. It had been generally accepted that the tolerable daylight factor in offices was 0.2 per cent. In 1929 Sir Felix Clay had claimed that 1 per cent was the minimum necessary in schools, which corresponded to a daylight factor of 0.5 per cent, a figure recommended by Mr. Waldram in 1913. The Board of Education in their regulations of 1936 recognized this standard and laid down this figure as a minimum.

The N.I. of I.P. as a result of their investigations in 1931 considered that a daylight factor of 2 per cent was desirable, and 1 per cent the lowest permissible figure. The Lighting Committee of the Building Research Board, however, advocate 5 per cent as a minimum, and this figure has been recommended as the standard to be aimed at in the Ministry of Education's new Building Regulations with the higher figure of 10 per cent where rooms are used for drawing, sewing, etc., and at the same time recommends maximum values should not exceed minimum values by more than 1 to 2, but still allow a minimum of 2 per cent. In modern schools with a large expanse of glass on one side, the daylight factor will vary from 15 per cent down to 2 per cent.

Thus a very difficult problem has been set if the new standard is to be reached, and the only solution at present appears to be some form of top lighting. This very high standard of lighting intensifies the conditions that larger windows have already created, the problem of glare, which it is recognized is not only unpleasant but is also harmful. The Lighting Committee would therefore like more control to regulate daylighting, but any system which is dependent on the teacher cannot be really regarded as satisfactory.

The Post-War Building Studies No. 12 give a number of examples of the amount of light in different types of classrooms. For example in a school of 1850, with Gothic windows, illumination varies from 4.0 per cent to 0.5 per cent near the farther wall. It is commented that the lighting could be quite pleasant, the deep splayed reveals reducing glare.

In a school of 1910 with four Georgian sash windows, lighting is slightly better—5 per cent to 0.75 per cent.

The modern classrooms with one fully glazed external wall lighting varies from 15 per cent to 2 per cent.

A clerestory window in the inner wall improves conditions for all except those in the worst position next the inner wall.

The best distribution of light is obtained where, in effect, normal vertical lighting is replaced by horizontal lighting. A classroom is also shown which employs a number of vertical baffles and horizontal hoods, and comment is made that the distribution of light is very even and the baffles and hoods would eliminate glare, so that whilst standards of intensity are lower than desirable, I suggest good conditions may compensate for this. I, personally, am not aware of any conclusive evidence that can be said to show this very high standard of lighting is essential to protect the eyesight, and there are, of course, experts who definitely disagree with its necessity. It may yet prove this excessive zeal for light may have to be modified as have other ideas which have dominated school design from time to time.

Top lighting has many drawbacks, it calls for more elaborate construction and more or less restricts building to one storey; it creates heating problems, provides a maintenance problem both to keep the glass clean and for repairs. Top lighting in schools is not a new idea, and was at one time definitely objected to by the Board of Education. I, personally, have always found top lighting to have a peculiarly depressing effect, but this may be a purely personal reaction. In view of all the complications that arise both in planning and designing a school to provide top lighting, I feel more evidence on this subject is called for. One feels here is essentially a problem to be investigated fully, and that more schools on experimental lines should be built and tested. It may be that bi-lateral lighting is a better overall solution, or that the more free-shaped classrooms popular in U.S. may give a better and cheaper solution.

This daylighting problem has been tackled in the U.S.A. In one design use is made of glass bricks, to diffuse sunlight, whilst low glazed windows still allow the pupils to see outside. This idea is now being developed by using special glass bricks that

direct the light to the ceiling, which then acts as a reflector to give even distributed light. Then in a Californian School a new approach is given; the principle is that the classroom faces north, and sunlight is reflected through a high window into the classroom. It should be noted the pupils sit with their backs to the source of light. (*See section on opposite page.*)

Ventilation

The number of air changes in each room has now become a 'Statutory Rule and Order' under 'The Regulations Prescribing Standards for School Premises' and varies from six air changes per hour in classrooms to two air changes per hour in staff rooms, but we are not told how this is to be achieved.

If ventilation was the only problem to be found in planning a school and designing a classroom there is no doubt the principles developed by Dr. Reid in the Staffordshire pavilion school with the low hopper on each side of the room and the open corridor provides a real solution. Mr. Widdows claimed that when this principle was applied by him to the Derbyshire Schools that 10 sq. in. of hopper per child gave ten air changes per hour with a wind blowing at four miles per hour to the face of the building.

The N.I. of I.P. have investigated the problem of ventilation in schools very thoroughly, and no doubt the new standard called for is based on their findings and recommendations. In some early investigations for the N.U.T. a certain classroom was found to have a pocket where there was never any real air movement, and by a coincidence the school authorities had noticed pupils sitting in this part of the room never seemed to do so well either in examination or other work.

There is no need to stress the importance of ventilation, we are all aware of the discomfort we all feel where ventilation is bad.

The N.I. of I.P. recommend that the main school windows should have: top sashes—pivot hung; centre sashes—side hung; bottom sashes—hopper hung; and with a window into the corridor they consider air movement and air change can be satisfactorily controlled. The difficulty, of course, is that the operation of this ventilation falls on the teachers, and where he or she does not like fresh air the system cannot achieve its object.

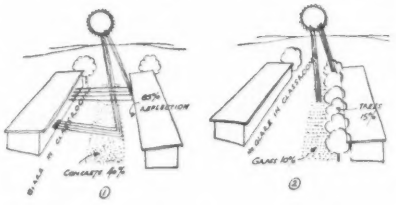
The N.I. of I.P. appears to be satisfied that with high opening windows directly opposite the main windows, satisfactory air movement will be achieved, but point out that in corner rooms it is not enough to ventilate only from the two adjoining outside walls.

I would still like more evidence that the high level window does make the necessary air movement where it is required; that is, at the children's level, as it seems to me the clerestory window is only a partial improvement on the old-fashioned ceiling ventilators. Of course in theory perfect control could be obtained by mechanical methods, but there is ample experience in the past to realize the superiority of natural ventilation. Natural ventilation reduces the risks of epidemics and respiratory diseases and acts as a stimulus and reduces mental fatigue. Mechanical ventilation tends to slow working output, tends to cause mental fatigue and restlessness; but perhaps the most valuable contribution of natural ventilation is that it teaches children the need to open windows.

Acoustics

I think we should give full credit to Denis Clark Hall for having first focussed attention on the importance of acoustics and sound insulation in relation to school planning. But whilst I personally do not consider this arrangement of classrooms in his interesting design for the NEWS CHRONICLE School are in fact better arranged as regards sound than the orthodox side by side rooms, he has brought out a point which has perhaps not been fully considered in the past, the relationship between noisy rooms and quiet areas.

I have found the one point on which all teachers seem to agree and have in common



The effect of yard surfaces and planting on glare in classrooms

is the desire for quiet conditions in which to work and freedom from external noise interference. There are three different problems to be met: (1) The acoustic treatment of the rooms themselves; (2) soundproof construction; (3) planning of rooms in relation to each other.

It is now, of course, generally accepted that the assembly hall should be properly treated to provide suitable acoustic conditions. I am satisfied that proper acoustic treatment inside the classroom can definitely provide less tiring conditions both for the pupils and the teachers. We have all experienced the strain of trying to talk or listen against an excessive background of noise—both internal and external, and a lack of good conditions in this matter prevents children from concentrating and they become restless and fidgetty.

Corridors call for special consideration as they can be excellent conveyors and collectors of sound, and in this respect, of course, the open corridor at one time so popular provided an excellent solution.

It is now possible, of course, to calculate the exact noise level caused by external noises entering an enclosed space, and sound entering by open windows, doors, cracks, heating pipes and vibration of the structure itself particularly in steel-framed building with wall, floor and ceiling panels. The degree of quietness to be aimed at is that noise in a classroom should not exceed 35 decibels, in an assembly hall 30 decibels, and in other rooms up to 60 decibels.

Providing suitable conditions reacts on our planning and construction and calls for our enclosing space into what might be described as 'Noise Zones'. It is well to remember that trees, shrubs and grass all absorb sound and are useful as sound breaks and can assist as a screen between noisy play areas and classroom units.

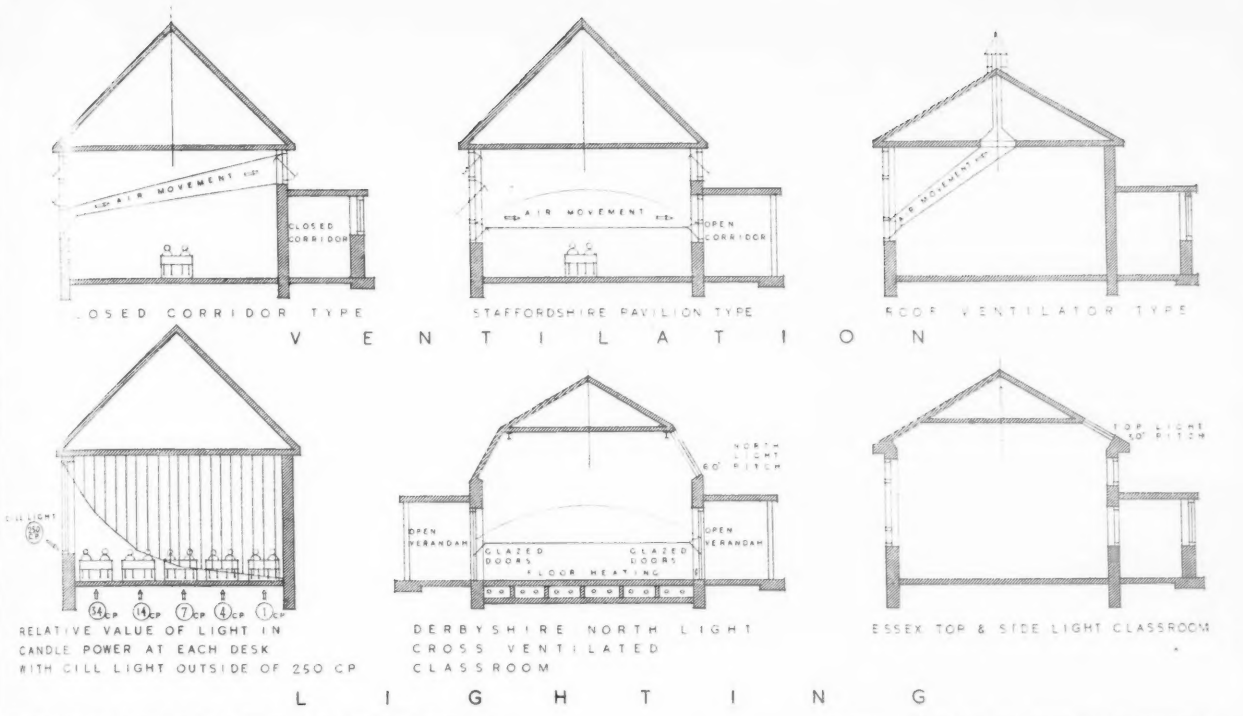
Flexible Planning

I would like to make it quite clear that in anything I may say with reference to flexible structure I am not condemning the present popular idea of so-called 'flexible schools', but I do want to suggest that we should keep a sense of proportion in considering this new idea. Those of us who were active after the first great world war will remember how when the cost of building rose to what we then considered to be fantastic heights, we experimented with prefabrication and various types of alternative construction which were described as temporary or semi-permanent, and then suddenly realized that what in fact we were doing was to spend more money with much less satisfactory results than we should have done with more orthodox construction; we forgot that new materials should be our servant and not our master.

It was Winston Churchill who expressed the opinion that 'We shape our buildings and then our buildings shape us'. As an architect, I like to think this is a sound observation, and I believe the buildings in which successive generations are educated can play an important part in their education and development. I have frequently noticed that where teachers are working in a temporary school how remarkable is the urge to have such buildings replaced by a permanent substantial structure, and I believe a school building should not only provide beauty and pleasing surroundings, but it is important it should give that sense of stability and security which is vital for the full development of the child. I sometimes think today we forget we belong to an ancient profession; a profession whose most lasting contribution to civilization is architecture.

I have already referred to the three basic requirements which have to be faced in the designing of a school, and whatever our final solution of each building, it will be a compromise and we should be prepared to sacrifice some so-called efficiency, which by our skill should be more than compensated for by the pleasure our building should give. The basis of the architect's contribution should be to temper efficiency with beauty. If material super-efficiency is all that is required we should not waste our time with æsthetics but concentrate all our energies on science and engineering.

It sounds attractive to design a building so that it can easily be altered to meet future needs, but would any of the earlier types of schools I have referred to really lend themselves to this even if built of some light materials. It is possible that in most cases it would be often a better economic procedure to face up to demolition of a building which no longer serves its pur-



Ventilation and daylighting in some older classroom sections

pose. So let us be careful how much of our special contribution to the community which it is our privilege to give is sacrificed for an idea which may not be satisfactory in actual practice.

There was once a proverb: 'The bad workman blames his tools'. Today, of course, this proverb reads: 'Give us new and better tools and then we will give you the goods'. But how many of us really believe that to replace Oxford and Cambridge with a complete set of new and up-to-date buildings would prove to be a real educational advance? Is the idea that we should build our structures so that they will only last a few years really quite so rational as it sounds where education is concerned? Should there not be at least some permanent nucleus around which a school may develop?

We should weigh very carefully in the balance prefabrication and structures whose only justification is that they may be flexible enough to meet the unknown needs of the future, but equally we certainly should not condemn the idea; it must have its place and purpose, and it is for us as architects to find the true solution.

Conclusion

After I had written this paper and I was reading it through, I came to the conclusion it had probably got the wrong title, it should have been 'A Cautionary Guide to those about to build a School'. But today the school architect is facing opportunities and a scope we could hardly have dared to hope for, and when I look back over the past and remember how often the last word in school design has been reached I am a little alarmed at all the committees, all the reports and Codes of Practice which are now providing the ready-made solutions to all our problems, lest they are going to stifle all real progress and destroy that initiative which has been perhaps more marked in school design than in any other type of building. There is still so much to be achieved before we find a complete and balanced solution to all the factors involved.

In spite of the admirable desire today that there should be equality of opportunity for everyone, I personally hope this is not to be interpreted that everything is to be standardized. I have a firm belief that every school building should if possible have its own individuality, its own special æsthetic appeal, and if the object of modern education is to develop the individuality of the pupil, should not the architect also give his building individuality?

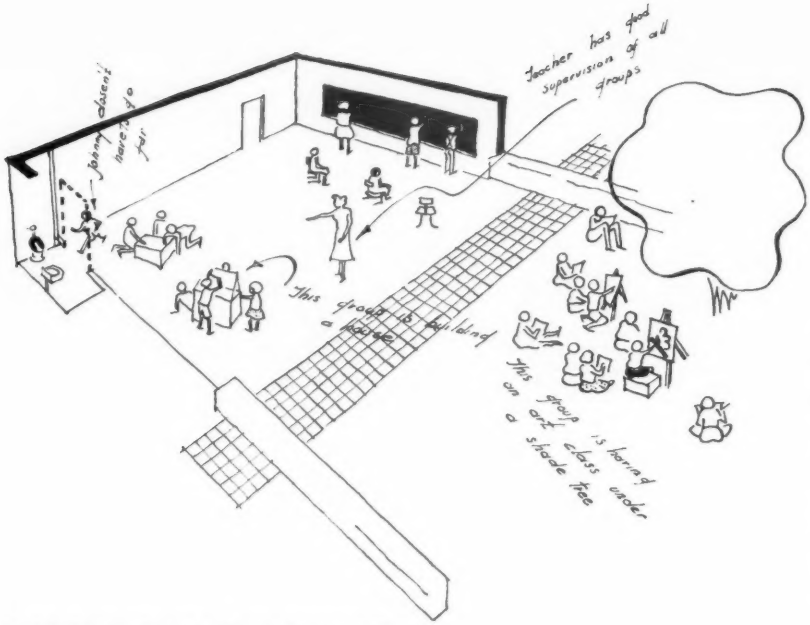
This does not mean every school should be a different style, but those of us who have tried to add interest in the layout of the temporary prefabricated bungalows know that however well the layout appears on paper, the repetition of the standard building seems to rise superior to all our efforts, and the result still seems to be just a collection of huts, and this is interesting because Dublin, where we are holding this Conference, largely owes its charm and character to repetition—its streets of simple Georgian houses and terraces. Individually these houses are very plain, almost austere and grim, but grouped in masses it gives this city a vitality and charm that makes it a city every architect should visit. Why is it that these Dublin houses give us so much pleasure in contrast to the dull result the repetition of standard units produce? If Dublin can help us to solve this problem, our Conference here will have been more than justified.

DISCUSSION

Mr. C. G. Stillman [*F*]: It gives me great pleasure to propose this vote of thanks. I am sure we have all listened with very great interest and enjoyment to Mr. Wilshere's paper.

I would like to refer to the task which is confronting us architects now, and I am *not* referring to the fact that we are being asked to build schools without bricks, steel or timber; we hope that will be made right in time. We have to face a building programme of an estimated thousand million pounds and that will take at least 20 years to carry out. We can only do that if we are able to build schools more speedily than we have been building them in the past. If the new Act is to be put into operation in anything like a reasonable time, speed seems to be one of the most important things.

One of the most important features of the new Act is the provision of secondary education for all pupils over 12 years of age. At the moment our secondary system of education is providing for less than 10 per cent of the total children in the schools. We have to provide for that additional secondary school accommodation, and it is a very big task. With



Sketch showing the value of open classroom planning

shortage of labour and materials it is only natural that people should be considering new methods of building—methods which will speed up the building of urgently needed schools. And so we hear much about prefabrication and standardization. We have got to face this problem even though we may not like the idea. We have got to consider certain elements of standardization which may help in the production of units and parts of schools, and I think the task is one to which we have not been able to give enough attention so far. I hope we will be able to find a solution which will give us essential freedom for planning and designing.

Any attempt to standardize schools as a whole would be fatal. We would be only adding very quickly to the long list of obsolete schools we have already. We have got to build, but at the same time leave the door open to later developments. Therefore, we must have what has been described as the open and flexible plan.

Mr. F. R. Steele [*F*], seconding, said that Mr. Wilshere had brought out an interesting point when he said that in 1902 it had been thought that finality in school design had been reached. Some teachers thought that schools should be bigger and that every room should be capable of being used as a practical room. The new regulations were going a little too far as regards pattern.

Mr. Maynard Lyndon (of the American Institute of Architects) said that in America they were aiming at a classroom of 1,000 sq. ft. They had not built very many of them yet, but designs were being approved by the State Department. This was a very difficult proposition because to achieve 1,000 sq. ft. it was desirable to have the classroom nearly square.

Mr. S. S. Kelly [*F*] said there was one thing which Mr. Wilshere did not mention —the size of schools. In the planning of schools in Ireland they were following as far as possible the excellent standards arrived at in other countries. There had been some very fine schools built round Dublin. One of them accommodated 3,000 pupils, and he thought that was too large. In a school of that size a member of the teaching staff would never get to know each pupil in the school. He would be in favour of limiting the size of schools and building more of them.

Mr. S. H. Loweth [*F*] said that an improvement in ventilation was needed in many schools. Artificial ventilation was needed in lecture rooms and in laboratories which had to be blacked out from time to time.

Mr. F. McArdle [*F*] said that in school building architects were not only confronted with regulations but they had to keep the cost of building within limits. He knew of a case where a school was being erected for boys and girls, and in order to reduce the cost of building the Department wanted to cut out one of two entrances to the building.

Mr. A. Morgan [*L*] asked for more attention to the use of colour in interior decoration. Bright colours were very important in classrooms. Ease of cleaning was also important; he had been asked if he could avoid radiators, pipes and other dust traps; the only solution to this appeared to be under-floor heating as was used in some of the schools of Derbyshire. He had also been asked to provide light furniture which would be easily movable and thus enable the cleaners to do their work more quickly.

Mr. E. G. Fowler [*F*] said that suitable decorations could be used to increase the percentage of daylight in the interior parts of a classroom.

All the talk he heard about prefabrication and standardization was giving him a certain amount of worry. He was afraid that prefabrication had come to stay. As far as school building was concerned he did not object to standardization provided the architect had some means of providing for a certain individuality.

Mr. L. W. Elliott [*A*] asked for more consideration of appearance. When he thought of his own school days he could not forget the appalling ugliness of the school buildings. He asked architects who were designing schools to bring a little bit of beauty into their work.

Mr. R. S. Lawrie [*A*] said that generally speaking the last thing that was thought of in the building of a school was the site. Town planners should be told that the site was a vital factor in a school plan, and then they might not provide one with a north slope.

Mr. F. E. Towndrow [*F*] said that good architecture was one of the essential basses of good education.

Mr. L. J. Murray, Department of Education, said he was not an architect, but had been invited to the Conference. The design of a school building should be a part of the educative process because the child absorbed quite unconsciously the beauties which it saw round it in the school, and it could not do that if it was being educated in drab buildings. He hoped to see for himself what Mr. Wilshere had accomplished.

Mr. R. S. Wilshere, after thanking the proposer and seconder of the vote of thanks, said to deal fully with all the points raised, would take some time, and so he could only reply very briefly to some of them.

He realized, of course, the position that was causing the demand for prefabricated structures, but considered we should watch carefully the effect this effort to provide a quick solution of our present difficulties might create.

Mr. Loweth had raised the matter of ventilation to rooms which have to be blacked out for use of the epidiascope, and he would agree it might be desirable to provide some means of mechanical ventilation here, but would suggest this should be of a simple type to supplement the normal natural ventilation. As for classrooms facing north, he had found this opinion to be shared by a number of teachers, and the late Chief Inspector of Schools to the Northern Ireland Ministry of Education was an advocate of this aspect. Mr. Towndrow had suggested that good architectural surroundings should be a basis of education; this policy he considered should be always kept in the forefront in school design. Mr. Wilshere then thanked the Conference for the kind reception given to his paper.

The Architects' Conference, Dublin

Speeches at the Banquet

The President in the Chair

The Toast of 'Ireland' was formally proposed by the President, Sir Lancelot Keay, K.B.E.

Mr. Sean MacEntee, Minister for Local Government, responding, said: You have done me a very great honour in asking me to respond to the toast of our country, and I should have great difficulty in finding words to thank you appropriately for it. Perhaps you will understand, therefore, if briefly but most sincerely I say no more in that regard than 'thank you' and proceed, on behalf of the Government and our people, to extend to you, Mr. President, the Council and members of the Royal Institute of British Architects, and to our other distinguished guests from overseas, the warmest of Irish welcomes.

It would deceive nobody here, I think, and least of all, our British friends, if I were to pretend that over some six or seven centuries we have been invariably glad to see them, particularly when they came in hosts as they are gathered here tonight. For in the old days of private enterprise, before war-making became a nationalized industry and was still only a pastime of the leisured classes, such an array would have represented a considerable invasion. No doubt it would be true to say that when they did come in the pride and pomp of war we did our best to give them a warm reception. But it would be quite untrue to pretend that the visiting party regarded us as ideal hosts, were thankful for our rude hospitality or were favourably impressed by the earnestness of our desire to greet them as, in our opinion, they deserved.

But however we may have regarded some of their incursions in the past, today we know that our guests from across the Irish Sea come in peace. We welcome them most cordially as ambassadors of goodwill. We are delighted to have them with us, and we are very appreciative of the compliment which they have paid to us in arranging that the most important corporate function of their Institute should take place this year in Dublin.

I suppose that for some members of the Royal Institute of British Architects this is their first visit to this city, perhaps even their first visit to Ireland. I hope that their stay here will be enjoyable. I know that their Irish colleagues will do their utmost to make it so, as indeed will all our people, and I think they will find the capital of our country pleasant and interesting from an architectural point of view. Owing to war-enforced austerity during latter years it is at the moment, perhaps, a little shabby. But then, all the best people are that nowadays, and so are many noble cities, ours among them. It is a time when equality counts more than merit. Our visitors will find themselves, however, among warm friends. Indeed, they should be quite at home here; for the British and the Irish peoples have a great deal in common with each other. In the course of our long intercourse we have learned much from each other and about each other. Wittingly or unwittingly, willingly or unwillingly, we have been partners in great enterprises. Both peoples have sent their sons and daughters to found and to build up the great democratic States of the world. We may claim to be jointly the progenitors of the great nations which now people the greater part of the North American Continent, the whole continent of Australia, and the whole of New Zealand. There is hardly a leader of public opinion in those countries that is not proud to trace his ancestry back to these islands. We Irish and British are associated with each other, and with them, by ties of blood, of trade, of political tradition, and of common interest in great issues that touch the peace, the prosperity and the security of our countries and of the Christian world.

In the past the association between Great Britain and Ireland in its political aspects, at least, was, for us Irish, a forced and painful one. Today it has become a free and voluntary one: and because it is, in simple truth, a free and voluntary association, I believe it will become ever closer and more enduring. It would be that already were it not for the tragedy of a divided Ireland which impedes the full development of that association in economic and international affairs, and prevents the closest collaboration in some matters of vital interest to us both. Yet, looking on the troubled world of today, and with some foreboding as to the future, may I suggest that no narrow interest should hinder an accord which will make it possible for the peoples on both sides of the Irish Sea to live in peace and freedom, not only as good neighbours and good customers of each other, but as close and staunch comrades.

But, I did not rise to speak of these matters, but to thank you, Mr. President, and to welcome most heartily you and your colleagues to our country. It is indeed, a source of the greatest gratification, not only to your Irish confreres but to us all, that a gathering so representative of your profession should be held in our capital. For the profession of architecture is held in high esteem as a great and noble one. Even from almost prehistoric time its masterpieces have given concrete shape and form to some of the noblest conceptions of the human mind. Of all the professions I should imagine that it must be the most difficult. In no other calling must the creative faculty be so intimately conjoined with constructive and administrative ability. It demands that an architect should be not only an artist but also a practical man of affairs.

Ruskin has said: 'No one who is not a great sculptor or painter can be an architect. If he is not a sculptor or painter he can only be a builder'. As a layman I should regard that as one of the great critic's characteristic overstatements. Yet the modern demands of your profession would seem to exact, not less, but even more than Ruskin required. Today it would appear that the architect must be not only an expert in the plastic arts, must not only have mastered all the crude material things that are the dust to which he gives shape and, by his genius, informs with immortal beauty, but he must also make the sciences serve his purpose as well. And while it may not be necessary for him to be a master of them, he must be at least sufficiently acquainted with them as to know what they can do for him. The architect, in short, has to be an artist, an artificer, an engineer of many-sided vision, whose difficult task is to blend the beautiful and the severely practical in one harmonious design.

Now we have it on unquestionable authority that no man can serve two masters. Yet the architect is required to do even more. He has to serve not only a master but a mistress, a master and a mistress who are each most jealous of the other. And yet he must unremittingly coerce them to cohabit within the same four walls. By the very nature of his calling the architect has to be the indefatigable match-maker of *mariages de convenance*. His unending task is to mate in indissoluble union a bridegroom who must justify himself by a prosaic and continuous usefulness, with a bride whose sole dowry is that, in age as in youth, she will be forever beautiful.

But the architect is bound to do more than merely mate the beautiful with the useful. He must make certain that the wedding will not be an extravagant one. For architects' marriages are consummated in stone and metal and the ceremonies are at once tedious, laborious, and expensive. They may have to be conditioned even to the sometimes parsimonious view of a client who is prone to look hard and lovingly at both sides of a sixpence. This, I think we may assume, imposes on the architect's imagination a sober discipline.

Today in the evolution of architecture we seem to stand at the beginning of an era of new conceptions in building methods and materials. The new glasses and plastics which are being developed today may enable the architect, by their translucency, their brilliancy, their adaptability, to transform what hitherto have been opaque and darkening walls, so as to give every nook and corner of his building the freedom of sunlight. Naturally, with the advent of new materials and new methods, new architectural forms will be evolved, and doubtless our Irish architects will adapt and apply them when they are designing and constructing the buildings of which we are in such need. I have no doubt that in doing this they will respect the traditions and modes of their illustrious predecessors who left us so much to admire; so that the Irish architecture of the future will possess all the dignity, simplicity and charm which our ancestors did so well impart to those gracious buildings that embody the cultivated taste of Georgian Dublin.

We in Ireland have many opportunities to offer to members of the architectural profession; for we have many deficiencies to make good in our administrative buildings, in hospitals and in schools, and, largest and most urgent task of all, in houses for our workers. You, Mr. President, I am told, have a record of illustrious service in regard to that last-mentioned activity, and that this record has brought you public honour. I am sure you will look with sympathy and understanding upon the efforts which we are making to solve that problem here. It does, indeed, take priority in our minds over all others. But apart from it, in the other fields I have mentioned, we have, for a country of our size and resources, a vast building programme to fulfil. To complete it worthily we want the guidance and assistance of architects of taste and vision. We rely upon the British and Irish Institutes and the schools of our universities to supply such men. I am sure we shall not be disappointed and that the architects whom you send forth will continue to bring beauty and dignity to our cities, renown to themselves, and lustre to their profession.

I have again to thank you, Mr. President, and your colleagues of the Royal Institute of British Architects, for the hospitality which you have extended to Mrs. MacEntee and myself, and for the honour which you have done me in calling upon me to respond to this toast. I assure you again that you and your countrymen and your distinguished guests from overseas are heartily welcome to Ireland. We hope that you will enjoy your visit here, that you will go home with happy memories of our country and our people, and that your further visits, whether in the public or private capacity, will not be long deferred. The more often you come and the longer you stay, the more heartily will Ireland welcome you.

Mr. Stephen S. Kelly, [*F*]: President of the Royal Institute of the Architects of Ireland. To me falls the pleasant duty of proposing the Toast of the Royal Institute of British Architects and the Allied Societies. A very short while ago this task would have been quite beyond me; but the Council of the R.I.B.A., like the fairy godmother, have waved a magic wand and behold, I am a Fellow of the Royal Institute of British Architects. I am telling you this so that if you detect in my address a note of exaltation, you will not attribute it to an unworthy source.

This is the third time your Institute has honoured us by holding its Conference in Dublin. I think we are justified in assuming that you like to come here, and that one reason why you like to come is that we obviously like to have you. The Royal Institute of British Architects has come to our city not alone but surrounded by her children—the Allied Societies. She seeks these opportunities of meeting her flock, gathering them around her for short periods in her busy life, and exercising her mother instinct in rejoicing with her offspring. Like a good mother she does not forget the need for guidance and instruction, and she has arranged that during this Conference papers be read dealing with the architectural aspects of two of the most important responsibilities of both our countries— hospitals and schools.

Once upon a time—over 100 years ago—12 architects met in an English tavern and the Royal Institute of British Architects was born. From that day it has increased in strength and stature and today gives a lead in all things which are of importance to the profession; and what is more, in all things which are important to architecture. Its guiding hand and wise counsel have been a factor in the good work which architects have done in many parts of the world to add comfort and grace to living.

On an occasion such as this to retrace, even in a cursory way the story of the R.I.B.A., during its more than century of life would, though relevant, be perhaps untimely. But a backward glance down the arches of the years shows a succession of great men, its Presidents, keystones of their profession and their Institute—and many of them outstanding figures in the cultural history of their times. In 1835 the Institute's first President was Earl de Grey. He was not an architect but a very influential patron of the Arts. In 1860 Charles Robert Cockerell brings to our mind the Battle of the Styles, the ferocity of which has long since died down. Architects have now perhaps more serious subjects for conflict than Classic versus Gothic. Towards the end of the 19th century, Alfred Waterhouse, President of the Royal Institute, contributed to the heritage of fine architecture in Oxford and Cambridge. And in this 20th century, Ernest Newton who has added much to England's wonderful tradition of fine country houses. Sir Raymond Unwin, whom the student of town-planning has reason to remember. Sir Giles Gilbert Scott, of Liverpool Cathedral fame. Sir Giles's name suggests to us that you have your problems at Bankside as we have at Beresford Place. Goodhart Rendel — architect — artist — writer—musician; Sir Percy Thomas, architect of some of England's finest public buildings.

These are only a few of the great men who have guided the destinies of the Royal Institute of British Architects. With these great names of former Presidents is now linked the name of Sir Lancelot Keay—which I wish to couple with this toast. The President of the R.I.B.A. is a man of artistic and sensitive perception and, what is perhaps unusual, he combines with these qualities the ability to organize and to get good things done. He has enriched the cities of Birmingham and Liverpool with houses for their people and fine buildings to adorn their streets. His advice and guidance have been sought on matters of housing and town-planning by the Ministers whose duty it is to deal with these matters. The R.I.B.A. have certainly put the right man in the right place at the right time. Before I finish with the President, allow me on behalf of his friends in Dublin to congratulate him on the great honour which this year has been conferred on him—Knighthood of the British Empire.

In these days of shortage of building materials and its attendant but necessary evil Government control, architects have been working under great difficulties. We have felt this so much in our small country that we realize that in Britain where destruction was widespread and where the normal objectives of human activities had for six or more years been almost entirely submerged, the difficulties of planning and building must indeed be very formidable. In the necessity for trying out and adopting new methods of construction, some of them revolutionary, it is comforting to observe that Britain will not discard her grand tradition of brick and stone and timber. The colour and texture of brick, well and truly made and well and truly laid, the fascination of the shadows on stonework and the pattern of its jointing, are of the fashioned fabric of the nation and should be made to endure.

The Royal Institute of British Architects were largely instrumental in obtaining in Britain registration for architects. We have sought a similar measure here in Ireland. We have considered those who wished to build should be protected from the untrained practitioner and that the buildings which this generation will hand down to posterity should be planned by qualified architects. A nation's architecture is one of its most important assets, materially and spiritually, and should be jealously guarded.

While we have been unsuccessful so far in our efforts towards registration, it is only fair to say that as far as our Government is concerned, architects are virtually regis-

tered. Our rulers are meticulous in ensuring that only architects who are qualified be employed on works involving the expenditure of public money.

I have been impressed with the thought that this is a very important toast and seldom before have I so wished for the gift of eloquence. My nerve almost failed me when in thinking what I should say I was reminded of the school-boy who in struggling with an essay on Shakespeare wrote the following: 'A lot can be learned from Shakespeare—and we can take warning from many of his characters. Julius Cæsar made a speech from his chair and his friends rushed up and killed him.'

Mr. President and Members of the Royal Institute of British Architects, although this is your night and we are your guests, you are visitors to our city and it gives us pleasure to welcome you. We can regard the individual members of your Institute and its Allied Societies as ambassadors of goodwill from many and widespread parts of our world of architecture.

Sir **Lancelot Keay, President:** On behalf of the members of the Royal Institute of British Architects and its Allied Societies I thank you, Mr. President of the Royal Institute of the Architects of Ireland, for the very kind way in which you have proposed this toast, and you, ladies and gentlemen, for the generous manner in which you have acclaimed it. You have described the relationship of the Institute and its Allied Societies as that of mother and children. Despite her humble origin —for as you have said the Institute was born in a tavern—she has been a model mother, for she has allowed that measure of independence to her children which has preserved their freedom of action and individuality which is so important today.

I also thank you, sir, for your very kind reference to myself, though I realize my own unworthiness to occupy this important office when I recall the great masterpieces which stand to the credit of those of my illustrious predecessors, whose names you have mentioned tonight.

A day or two ago, when scanning some of the technical journals, I came across the question, 'What interest will Dublin hold for the visiting architects?' and later in the article it was suggested that most of Georgian Dublin was in decay, traffic confusion existed and slum conditions continued. I have always felt that apart from papers read, the value of a Conference such as this was the opportunity it afforded of greeting old friends again and making new ones, and the mutual exchange of views upon common problems. It cannot be disputed that much of the beauty of Dublin remains, whilst some of ours has been destroyed, and not always as the result of a second world war. But we across the water have not solved our problems of traffic congestion or obliterated our slums, and I see no immediate prospect of solution due to the difficulties which surround us. We shall find much to admire in Dublin, much that will be helpful to us.

Mr. Sean MacEntee, Minister for Local Government, and the President at the Conference Banquet

There was—I know—a time when architects visiting one of the most beautiful of the capitals of Europe returned with what have been aptly described as 'souvenirs de voyage', and in due course there appeared upon some of our buildings little 'motifs' that were not always of British origin, which upon closer examination appeared to show some Swedish influence. If we take an idea or two from Dublin you will not blame us, for I understand that impressions are the only safe things to take out of the country at the moment.

As I flew here in the early morning light yesterday, high enough to look down on the great panorama of mountain and dell, rolling field, golden sands or rocky cliff licked by the silver sea, and too high to assess whether the many buildings which appeared could be said to add to or detract from the works of nature—and then flew out into the space which separates the two islands—I could not help wondering what would be the trend of architecture in the world of tomorrow.

Then quite suddenly a cream-coloured building stood out in the slight haze as we dropped at Collinstown Airport. Once again I was able to admire the work of Desmond FitzGerald, to whom I would like to offer my personal congratulations on a particularly fine piece of work. Was this an answer to my question? That we should set about the solution of our problems entirely unhampered by traditions and the older methods of construction. I doubt if that is the answer. New problems are facing us every day, and we are right to employ new methods in their solution. These will influence design. But some of our problems are not new, they evolve from the conditions in which we are working today. In their solution we must take account of tradition and evolve our solution from that starting point.

You have mentioned the Bankside controversy, Mr. President. Of course, the one thing we don't want in Ireland is a controversy or an argument. But the Bankside controversy is a serious thing. For the first time we have seen dictatorship in operation against democracy. They have set aside the findings of a properly constituted planning authority, and they don't care two hoots what we say. That is the very serious side of it. But if you are prepared as architects to allow a policy of dictation of this kind and you back down easily, the pin will be tightened on you until every bit of individuality you have is squeezed out of you.

Much of the work of the immediate future must be dependent upon some Government approval. There is a very real danger that individual expression will be suppressed by bureacratic dictation, and all will suffer in consequence. Standardization will be overdone, poverty in expression can become meaningless, and the architecture of the world of tomorrow may in consequence compare very poorly with that of the past. It will be then, as I said this morning, that we shall say: 'Show me a Rembrandt that I may rinse my eyes' and we shall want to come again to this Emerald Isle with its blue mountains and its fairies and enjoy the hospitality of trusted friends.

But before we come again we shall hope to see many of you in England. Next year the Conference will be meeting in Liverpool —the city in which I have lived for the longest period in my life. Then I hope there will be a great rally of members of the

Royal Institute and many members of the Allied Societies.

Members of the Royal Institute of the Architects of Ireland, I thank you once again for the great welcome you have given us, the hospitality you have extended to us, and for all the care that has been given to the arrangements to ensure the success of the Conference. We shall take away the excellent Conference Handbook, and in years to come it will recall your great kindness to us whilst in Dublin.

Mr. Vincent Kelly [*F*] Past President of the Royal Institute of the Architects of Ireland, proposing the toast of 'The Guests', said: During the last three years two great Englishmen came to Ireland, one an actor and the other an architect. Their common sovereign bestowed on them a Knighthood in the present year. With all tact and acumen, Sir Lancelot has laid on my shoulders the responsibility for proposing this toast: it is an indication of his exalted power and a tribute to his own personality that his slightest wish is a command which not even an Irish member of his Institute has the courage or heart to oppose. Not that we are more disobedient than other people, but we define the word, and perhaps many other words, somewhat differently. You may remember the story of the Englishman, Scotsman and Irishman who were discussing domestic affairs. The Englishman said that he told his wife everything that happened; the Scotsman, who was perhaps a prudent and canny kind of man, said that he told his wife nothing at all. The Irishman said they were both wrong—he told his wife lots of things that happened—whether they had happened at all or not.

This is a toast in which the virtues of the guests are delicately extolled, and I feel sure that one of our English brethren would have performed this portion of my trust with more restraint and therefore with more conviction. But I am in the happy position of being on both sides at once—a position dear, or supposed to be dear to the heart of an Irishman. Be that as it may, I feel that it would be difficult for me to avoid saying a word or two about our visitors. My diffidence in speaking of this is that great minds, the minds of the Minister and myself, have thought along almost exactly parallel lines. I think he said that you were at once the hosts and in another sense the guests—the welcome guests—of our country. It is also one of my plagiarisms of the Minister's speech that it is one of our traditions to offer a great welcome to all strangers and to English strangers in particular, coming to our shores bearing arms or bearing gifts.

The statement I made with regard to the privilege of being on both sides at once is a privilege which is sometimes abused. A famous Lord Chief Justice in the latter part of the last century was sitting in the Court of Appeal with two brother Judges for each of whom he had an equal contempt. As was the custom, and I believe is still the custom, his junior brothers gave their decisions and the reasons therefore, first. One gave a decision for the appellant, and the other gave it against. The Lord Chief Justice gave his decision like this: 'I concur with my brother on the right for the reasons given by my brother on the left.'

As you may have gathered, our guests tonight are many and distinguished. Among them is Mr. Sean MacEntee, our Minister for Local Government. In any gathering of Irish architects in the past, and I feel sure in any gathering of English architects in the future, he always is assured of a warm welcome. Of our work he has a deep understanding. We are also honoured by the presence of the Minister for Posts and Telegraphs, a man who has left his stamp on more than one issue in his time. We welcome heartily Mr. Maynard Lyndon of Los Angeles, who is himself a distinguished architect and represents here the American Institute of Architects. I trust he will take back from this Conference pleasant memories of his short visit to Dublin. From the North comes Mr. Gibson, President of the Royal Ulster Society, who is a very popular architect and a very popular President with us in the South. And from Scotland comes Mr. Henderson, President of the Royal Incorporation of Architects in Scotland.

And now, ladies and gentlemen, we come to the ladies. I have always felt that this portion of my trust was one deserving of separate and special treatment at the hands of one young, sympathetic and virile enough to do it justice. But, speaking for myself, and perhaps for many more, I can assure them that they bring us back a glimpse of the Garden which is and was our true home. It is strange how some people suggest that it was this which gave inspiration to Milton when writing *Paradise Lost*. Man, we are told, was there thrown into a profound sleep, and woman was created from a rib taken from his side, and man married her. There are, of course, evil-minded people who say that man's first sleep was his last repose.

Mention of sleep and repose bring me back to the need for bringing these words to an early conclusion. And, last but not least in physical or mental stature we welcome heartily Professor Conway, President of University College, Dublin. Dr. Conway, with his distinguished colleagues guides the destinies of the only architectural school in this country, and if that school progresses as it has been doing during the last few years, it will take an eminent mathematician like Dr. Conway to tell us what period must elapse before the entire university is devoted to the viscissitudes of the architects.

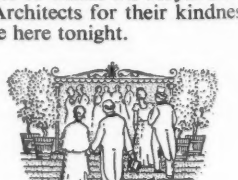
Before I sit down I should like to refer to a remark in the Minister's able speech, which has just occurred to me. I take little exception to what he has said, and I hope he will take less to what I am about to say. For once in his life he forsook originality and put himself behind Ruskin, who said that if an architect is neither a sculptor nor a painter he is only a builder. But whether an architect in this country is any one of these or not, he still needs the Registration Bill which would enable him to be considered officially as important as an auctioneer.

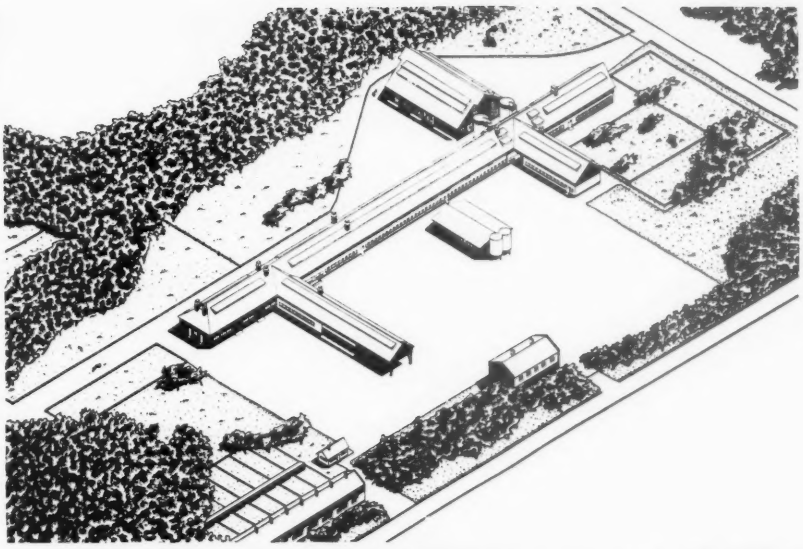
Ladies and gentlemen, I make the toast of 'Our Guests', and in the absence of Lord Rugby, who unfortunately is unable to be present, I couple with it the name of Dr. Conway, President of University College, Dublin.

Professor A. W. Conway, President of University College, Dublin: I feel at a decided disadvantage in getting up to speak to this very distinguished assembly in place of my good friend, Lord Rugby, who is unavoidably absent, and secondly because I have got to follow a speaker like Mr. Vincent Kelly. It is a dangerous thing to ask the President of a College to speak at this or any other hour of the night, because he is apt to take the opportunity of telling the world what he wants and what he hasn't got. May I say at once, however, that owing to the fact that we have a very understanding and sympathetic Government we are going to get everything we want. University College, Dublin, is by every standard a big college, but I wasn't always its president. I have had a past, and I don't know whether you would be pleased or not if I told you about it. But, before I was President I was an economic scientist, struggling with problems of great complexity with the architects. The College of which I have the honour to be President has a number of Faculties, one of which is architecture. It is part of my duty to provide architects. It is a very young school—how young can be judged by the fact that the oldest ex-student is Mr. Vincent Kelly. And, being young, it has got the least room, and is, in fact, overcrowded. But, thanks to the late Professor Butler and Professor Downes the school has progressed to such an extent that we have got conferred on it the recognition of the Royal Institute, which is of inestimable value to our students.

We intend in the future to put up an architectural school and Professor Downes has produced a very fine plan for it. But, as every architect knows, there always are difficulties. In our case the problem is how to fit our plans into the site available. We may get over that, but then we have the problem of materials. A short time ago a student was running down one of the corridors and I stopped him and pointed out to him the danger of what he was doing. I told him that six months ago a student running down the corridor, slipped and fell. He came down on his head and his head broke a tile, and we can't get those tiles anywhere.

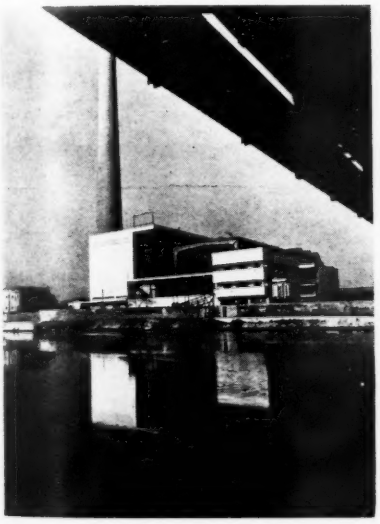
I am not going to keep you except to say that the Government have agreed with us that in the immediate future architects will be asked to provide plans for well over a million pounds worth of new buildings. I would like to thank the Royal Institute of British Architects for their kindness in inviting me here tonight.





Above: The Czechoslovak Ambassador opening the exhibition. Right: A modern collective farm. Part of the historical section of the exhibition. Below: Electricity works at Kolin by J. Frágner

Exhibition of Czechoslovak Architecture

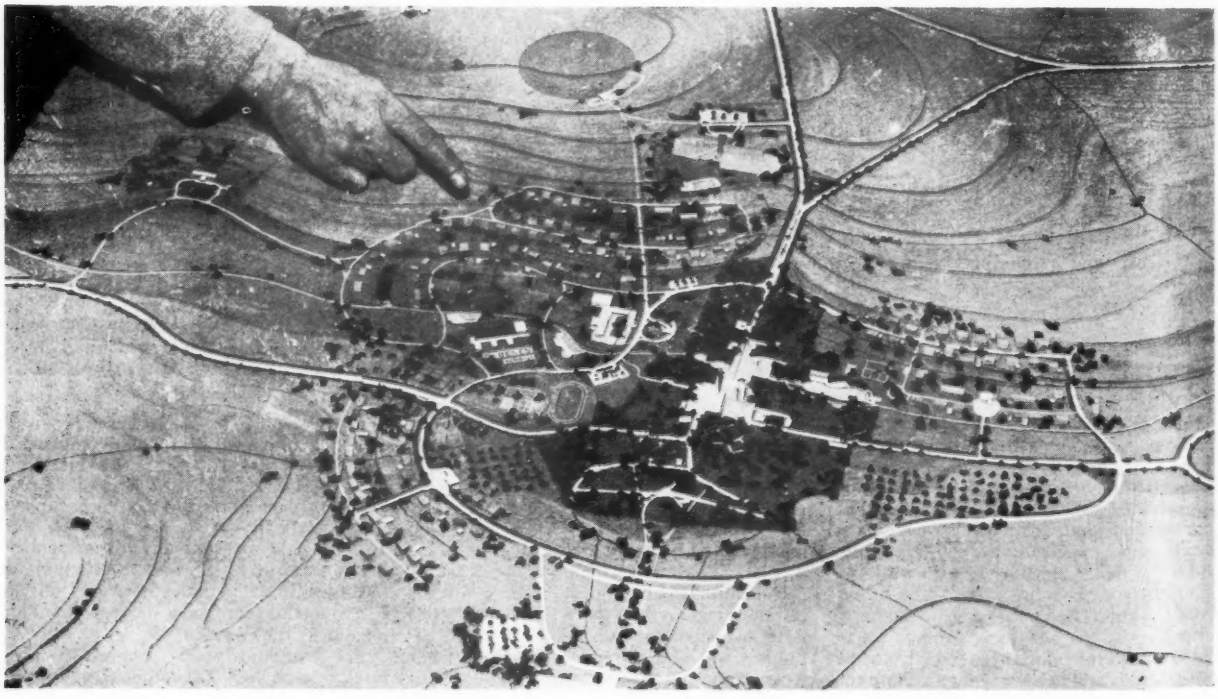


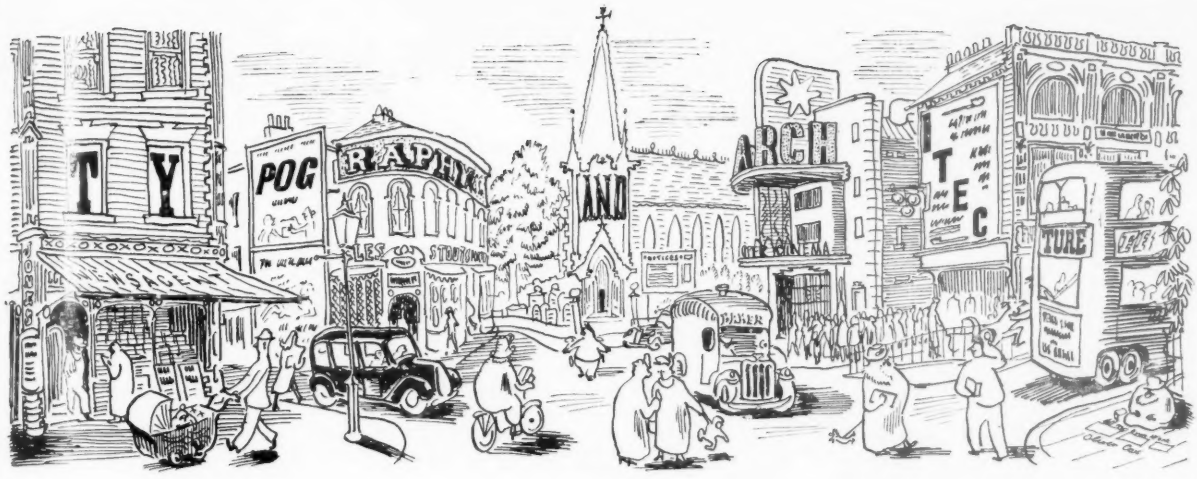
IN THE June issue of the JOURNAL a brief reference was made to this exhibition, which had not arrived here at the time of going to press; it is now possible to amplify the previous notice. On 9 June there was a private view and reception at which the guests were received by the President, R.I.B.A., Sir Lancelot Keay, and Dr. Kratochvil, the Czechoslovak Ambassador. After the guests had been received the party assembled in the Members' Room, where the President introduced His Excellency the Ambassador and invited him to declare the exhibition open. The Ambassador said that the object of the exhibition was to show the British public some examples of modern Czech architecture. In the early years of this century their architecture began to discard the old forms and the 1914-18 war completed the change of view. After that war, His Excellency said, new ideas in architecture began to appear in his country, but the largest part of the present exhibition dealt with the work done since the end of the last war and centred round their Two Year Plan of reconstruction. One of the main features of the plan was the provision of accommodation for 200,000 families, in the form of flats and houses. Hospitals and other buildings found a place in the plan just as they did in England, but housing had first priority. This Two Year Plan was initiated by the Czechoslovak Government on the anniversary of the foundation of Czechoslovakia; work was begun on the 1 January this year, and it was hoped to complete it by the end of 1949.

The exhibition was designed by Mr. Krejcar, and Mr. Triechlinger, of Prague,

Above: the Prague City Hall rebuilding scheme
Right: a collective house at Zlin by J. Vosenilek
Below: the scheme for rebuilding Lidice

and it closed on 24 June. While this exhibition was on view at the Institute a British exhibition of Town Planning was on view in Prague and was expected to arouse interest there, as Czechoslovak architects are paying attention to the work in that direction now being carried out in Britain.





Typography and Architecture

By Beatrice Warde

In a recent paper 'Typography and Art Education' published by the Association of Art Industries and the National Society of Art Education, Mrs. Beatrice Warde makes a strong case for the teaching of typography in our schools and in the design and construction professions. There is need for specialist training in Art Schools to attract not only commercial artists but all who are concerned in the commissioning of the printed word. She claims that architects and planners should have some knowledge of what is good and bad in typographic design. 'It is good', says Mrs. Warde, 'to be able to applaud and instigate typographic reforms in one's own community and profession'.

IN THE SENSE in which Architecture is an art, Typography is an art. That is, they both come under the head of 'making or doing intentionally with skill'. But they are not one-man arts like painting or oratory. The thing made, the finished work, is in every case the work of a team. The cathedral and its lectern bible, the house and the books on its shelves, the hospital and the surgical instrument maker's illustrated catalogue, the shop building and the billheads and leaflets that go out from it—all those are products of skill and creative intention, 'works' which can give keen pleasure to the perceptive eye when the intention is clear and good, the execution honest and adroit. But not one of them was begun and finished as a whole thing by one artist. Every work of Architecture, every work of Typography, depends for its success upon the clear *conveyance* of intentions, in words and otherwise from one human mind to others: from the man who is supposed to know how the finished thing should look and function, to a concert of specialists who are responsible not only to the master-designer but also to the public. Faulty masonry, or a misprint, is not simply a betrayal of the Whole Intention, it is also a matter of public concern. The coping-stone might kill a man, the misplaced comma might start a riot or a suit for libel.

Any attempt to criticize works of Architecture or Typography, any hope of appreciating and fostering significant new work in either field, must be based on knowledge of what *sort* of field it is. It is not the sort of meadow that one man and his dog can go out to mow. The building that offers no evidence whatever that skilled craftsmen worked exultantly upon it, is in that respect a dull building: though the public which assumes that building craftsmen are only a crew of sullen concrete-pourers and steel-riveters will be quite content to perceive the architect's intention, to applaud his solution of the given problems and to think of the 'making' simply as architect-getting-his-own-way. The analogy holds for Typography. The result of a good time-table standardization offers the informed critic quite as much pleasure as the sight of a successful new design for a chain of railway stations. There is first of all the pleasure of seeing something consistent and intelligent replace something incoherent and stupid; then there is the interest of noticing *why* the designer did this and that. One is actually delighted (in this case) to see that the intention was to lay down a 'foolproof' style which the dullest, most apathetic workman could not wreck; it would not have been a *good* standardization if that intention had not been present. This is all intellectual pleasure. But in a finely-printed book, where most of the style-problems were solved four centuries ago, there is sensuous delight to be got from the feel of the paper, the 'bloom' of the presswork, the subtlety of the line-spacing, and other evidences that the craftsmen concerned were very decidedly *not* dull, apathetic workmen.

Bear with me if I keep using the word 'intention' in place of 'design' for we have not quite yet finished our distinction between Typography and any one-man art. The sculptor who feels his way, takes a new hint from an unsuspected flaw in the stone, even half-finishes a job simply in order to 'see' it, is taking a perfectly legitimate way of showing himself what he means. He is not wasting other men's time and skill. But the master builder, or master printer, who is not perfectly sure what he means to do must stop and envisage the thing in detail before he can buy the bricks, or reams of paper. He must have a 'design' in at least the old sense ('not by accident but by design') and probably also in the sense of design as *dessin*, drawing. The master builder's drawing is called a blue print, the master printer's is called a layout. And whatever of the 'intention' cannot be shown in the drawing, e.g., as to the quality of the materials, is put into words and called, in both cases, the specification.

Here for the first time our builder-printer analogy breaks down, and in an exciting way. The divorce between designer-specifier and entrepreneur which took place in building some centuries ago and created the professional architect is only now beginning to take place in printing. You will not hear the word 'typotect' applied to any of the greatest typographic designers of our day, for although nearly all of them are outside the printing trade (i.e., neither indenture-freed craftsmen nor employing printers), they still prefer to function as consultants, not as contractors. They may take the credit or blame for every last detail of production as part of their responsibility for the whole 'look' of the finished thing; but they show no desire to

set up as firms, sweat over public competitions, risk capital, or break down the specification into separate sub-contracts. But firms of publishers and advertising agencies are already doing something of the sort—to the alarm of the more craft-conscious master printers who have no wish to be thrust into the ignoble position of the modern speculative builder.

So these printers are taking counter action by employing their own typographic designers—or calling in the consultant themselves—or, better still, *training up men in their own shops as creative typographers*, and simultaneously *showing their customers how easily any educated person can become a creative patron, a distinguished 'amator' and instigator of typographic progress, even a co-designer of brilliantly effective work—if he has a first-rate printer at his elbow*. Those words in italics will give any art master or any head of an Art School a clue to the two main objects of this paper.

One is to deal with the very few snags that one can find in the fairly simple matter of teaching Typographic Design in the vocational centre to future printers or to a mixed class of apprentices and 'laymen'. The other is to plead for the inclusion of training in the *Appreciation of Typography* in the secondary school as part of a liberal education: not as preparation for a career but as preparation for life.

The Art School *must* offer some instruction in Typographic Design whether or not it has a Printing Department. It dare not turn out fledgling commercial artists into their tragically over-crowded walk of life without any sound theoretical knowledge of type faces, layout and printing processes. It is wicked to let loose a would-be book jacket designer whose ideas of the Roman Alphabet are those of an eleven-year-old child. When a talented young illustrator is hawking his portfolio about in growing panic, or tumbling into the maw of a second-rate commercial art 'studio', he may well curse the school that never thought to train him to *design and* illustrate printed things and so earn a livelihood while he is winning a reputation as an illustrator. A course in Typographic Design can even attract to the Art School people who would not go there for any other reason: future advertisers, salesmen, journalists, booksellers, and others. (If future Ministers of the Gospel could spare time for such a course we should not see so many mean-looking parish magazines.)

The instruction can be given, and is better given, without ever picking up a composing stick. 'Touching type' is the poetic trade term for (e.g.) taking your fine layout to the case and making sure that it will work out in metal types—objects which will not compress like rubber if you have miscalculated the amount of copy that will go into the space. But if you are in any doubt about that, if you *need* the verification of the stick, you are not yet a good layout-man. And any man who has to see a printer's proof before he can 'see' what he really wants as the printed effect, is not yet a competent designer—he is feeling his way like an artist and wasting other men's time. A perpetual craving to 'touch type' means either that the designer is not paying enough attention to the thing he *is* supposed to make with his own skilled hands—namely the pencil layout: or else that he is not sufficiently aware of what it is that he is designing—namely a whole 'printed thing'. But it is perfectly natural for the designer outside the trade to feel a twinge of envy when he sees the little types clicking into the stick. It may not prove anything that he needs to prove, but it does look such fun . . . to the man who is forbidden to 'touch type'.

The total amount of time allotted to Art or contact-with-the-arts in the secondary school is curiously little, considering how peculiarly valuable such contacts are in helping the adolescent to adjust himself to the great pattern called civilization. The elementary school art classes helped him to realize his ego, get something off his chest; the progressive elementary school rightly treats Art as a branch of mental therapy, and values the paint brush because it helps children to 'show what they mean'. But now in the secondary school he must be helped to realize that he is not only a *Person* but also a member—of something older and larger than himself. He begins to notice æsthetically what other people 'mean' when they signal to him on canvas or stone, textiles or potters' clay. He keeps on making-and-doing things, but now with a new object, that of 'appreciation', or training of taste and critical judgement. The chance to practice now serves to inform and sharpen 'appreciation', and keeps it from degenerating into mere 'training in admiration'.

Unless our young people are taught to 'question' works of art and design: 'How were you made? What new thing have you to tell me about the beauty of nature or the possibilities of the human spirit? How do you fit your purpose?', they will go on being fooled by glibly meretricious work. But which arts provide the best exercise in 'questioning'? Obviously those which most affect the daily life in the individual and his community. Thus you dare not omit Architecture, for it takes less than three successive hours to give the future citizen *some* valid appreciation of Architecture *as it concerns him;* that is, some healthy curiosity about the design, planning and construction of the buildings in which he is going to live, worship God, seek entertainment, visit the sick, etc., as well as of the ancient ones which he will be able to use as light upon the history of civilization. Any modern architect will grant that; he would be pitifully grateful for three hours—nay, three *minutes*—in which to tell the man in the street how to look at the street.

And for parallel reasons you dare not omit Typography. In less than three hours you can arouse in any literate person a healthy curiosity about the design, planning and execution of the printed matter which he will be *using* for the rest of his life—whether as a business man uses a brilliantly designed sales catalogue, to enhance his firm's prestige, or as a reader uses a book, for entertainment or instruction, or as the connoisseur uses a fine or typical piece of printing from any period since 1450, namely as a peculiarly revealing light upon the æsthetic and social tendencies of that epoch.

Just as the pupil would get a glimpse of the problems of stress and strain while trying his hand at one architectural paper-model, so he would glimpse the problems involved in Typographic design while trying his hand at one 'layout', or learning to recognize a few outstandingly good type faces perfect examples of fitness for purpose. Three hours of elementary practice would at least destroy forever the lay notion that printed words somehow hatch themselves on paper. Considering that our own generation has produced an exciting renaissance of typographic style, one which has already transformed the appearance of even such humble instruments as time-tables and cheap Bibles, it seems a pity that any young person should remain wholly unaware of what is going on under his very eyes. The door to that awareness can be opened in a matter of minutes, nowadays. A child can instantly see the difference between a piece of printing that looks as if it had been scrambled together by dispirited technicians, and another which looks as if it had been *designed to* ingratiate itself and help the reader. A child can also see, from a moment's comparison of two sheets actually printed from the same forme, how careless use of unsuitable ink, paper, etc. can wreck or 'blur the intention' of what might have been an exhibition-piece of brilliant typographic ingenuity. But that is a way of teaching forever the lesson that *designing* (for industry) *means more than showing what you intend*; it also means choosing a manufacturer who has the wit, the equipment and the workmen to carry through that intention. Alternatively it means knowing how to modify the design so as to bring it within the compass of the factory.

We are dealing here with an Art which is a profound interest to students of the history of the arts in the 20th century. In this age of mechanical mass production, when practically every artifact is offered ready made, *printing is still made to order.* Your shoes and your window curtains and your breakfast china are all things which you bought ready made. You were not consulted on how they should look. Their design is the result of wary guesswork by manufacturers; and they were guessing not as to what *you* as a person wanted but as to what might be wanted by a minimum of ten thousand people. On the walls of your living room are pictures. Probably most of them are mechanical reproductions, mass-produced by their publishers on the assumption that there would be at least a thousand customers for each subject. But even if they are original paintings, the chances are a hundred to one that you acquired them ready made. The painter never asked you what you wanted. He, or rather his agent, presented you with a *fait accompli*; you could either buy it, or go climb a tree. But your daughter's wedding announcement, or your school's letter-head

and prospectus are things made specially to order. They are commissioned works—in a world which has elsewhere almost forgotten how to commission skilled men to produce specific things.

'Printing' is the accepted covering term for all those operations which normally take place—say, which *must* take place—under the roof of the printing office. (The fact that it is called a printing 'office' shows that it is concerned with the multiplication of words by type, not with calico-printing or the printing of cinema film.) These operations include type-composition, proof-reading, printing (known as machining), folding and trimming, etc. In the nature of the work there must also be a department for estimating costs, and at least some rudimentary facilities for showing a hesitant customer the 'style' in which the job can be set for a given price. These facilities may consist of a dog-eared file of sample jobs ('something in this style?') or they may take the form of a Layout Department bursting with ingenious new ideas.

From the Art Teacher's point of view, the totally ignorant man is not morally to blame for afflicting the community with yet another piece of pretentiously-stupid design or bad production. It is the fault of a society that surrounded him from infancy with ugly things and neglected his education. But when the horrid result is due to *half*-education—when it is either something 'de luxe' wrecked by incoherent design, or else something cleverly conceived but sloppily executed, then the blame narrows down to one section of the community; those concerned with Art Education. For in either case, the fellow was evidently taught *something*. In the first case, he somewhere picked up the moral courage and respect for craftsmanship that made him cry 'Spare no expense'; why was he denied the complementary training in taste, in respect for consistency, harmony ingenuity in design? In the other case, how did it happen that a man could acquire such good taste and judgement in matters of design and yet remain ignorantly contemptuous of the part played by the manufacturer and the quality of the materials?

Mrs. Warde then outlined a curriculum for the teaching of typography in art schools.

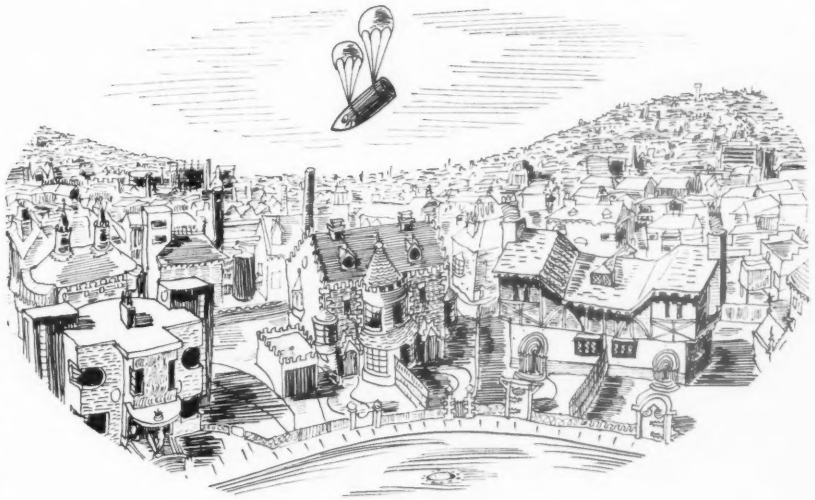
The first term should be devoted to the study of type faces and all that one has to know about the history of epigraphic and calligraphic lettering, in order to appreciate the best type faces. I should be inclined to start the whole thing off with a challenge to the class to cut a poster type for use in posters of school festivities; an alphabet of capital letters two inches high to be cut in linoleum or wood and used as stamps. Let them discover, by argument and comparison and legibility tests, why the classic Roman inscriptional capitals work better than any 'fancy' letters. This initial project makes them realize that a type is a *cut* thing, not a drawn thing, and that an alphabet or fount is a collection of characters which must each preserve its individual 'character' (e.g., the worst thing an O can do is to lose its roundness and try to look rectilinear, for then you might mistake it for a D); but that it is also a collection of shapes meant to be used together, bound together by subtle consistencies of treatment. Give them some notion of why classic capitals were designed as problems in geometry. 'Euclid alone has looked on beauty bare', and it will purify their taste after the sight of so much whimsy-whamsy lettering to work out those two-inch letters with straight-edge and compass. As Mr. Stanley Morison once said: 'Imagine yourself on a swaying scaffold in a high wind, chiselling three-foot letters on a triumphal arch, and you will understand how the rule and compass came into it.'

In the second term they should have a layman's-survey of printing methods and processes, and some glimpse of the endlessly fascinating subject of paper; its surfaces, tones, substance, standard sizes and classic sub-divisions—quarto, octavo and the rest. Let them also compile a big album, a typographic Portrait of the Age, made up of as many different kinds of printed matter as they can collect, even down to handbills and tram tickets. They are all 'problems' in design and fitness for purpose. 'What is wrong with this piece? How would you re-design it to make it fulfil the intention better?' At this point the English teacher will begin to cheer, for good training in Typography begins with inculcating respect for the right ordering of words and meanings.

As you see, it is something more than that course in decent lettering and calligraphy which is an essential part of a liberal education. At the end of it the pupil is not only able to see the mean hatefulness of bad street signs and ugly type, and to see the bumptiousness of the sort of handwriting that 'reveals an interesting personality' without revealing what the scrawler was trying to convey. He also is able to see what the untrained eye can never see, is not supposed to see; the wonderfully subtle appeal to the subconscious mind which is made by a piece of good typography. 'Printing should be invisible'—to the reader while he is reading. The best type faces, the best designers and draftsmen, conspire to focus his mind through their polished-crystal window. If he has no notion of how the words got on the paper he will express his appreciation quite unconsciously, simply by starting to read. But it is pleasant to be able to see what art and skill went to that feat of self-effacement. It is good to be able to follow and applaud the big scale 're-stylings' of magazines, newspapers and industrial typography; and it is still better to applaud and instigate typographic reforms in one's own community, on however small a scale.

One last word about Typography in the elementary school. If it be true that the object of Art Training in such schools is to encourage self-expression, then there is no room in it for Typography. In more senses than one, you can make a bigger splash with a paint brush than you can with a pica rule. Let the younger children have their fun as artists, making whole things by hand and 'showing what they mean'. They will then be ready to encounter Architecture (where the first question is, what the community means), and Typography, where the object is to let the *author's* meaning shine through. Meanwhile, simply try to guard the babes from mal-education of the eye. You can scarcely help it if their school building is an eyesore, though it means extra work when they come to the Appreciation of Architecture. You *can* do something about ugly schoolbooks and signs that 'condition' children to a tolerance of ugly print. You can rage aloud, and sooner or later something will be done about it. For there is this to say of Typography when you are comparing it with Architecture: when something ignoble or silly has been inflicted on the community it does not require a parachute mine or an earthquake to get rid of it.

Drawings by Oliver J. Cox [*S*].



'. . . a parachute mine . . . to get rid of it'

Vitality and Order in Architecture

By Sir Kenneth Clark, K.C.B. [*Hon. A*]

Extracts from an address to the Council for Visual Education at the Royal Society of Arts, on 6 May 1947. Mr. Clough Williams-Ellis [*F*] in the Chair

THE DESIGN produced in a country, in architecture, in things of daily use, even in clothes—is a reflection of certain conditions of climate, landscape, atmosphere and race. These conditions are so all-pervading that it is foolish to fight against them. The right course is to recognize them and turn limitations into strength. Now the traveller returning to England may well agree that we have in a small space more varied scenery and more amiable looking inhabitants than anywhere else in the world. But he must, if he lives through the eyes, be struck by one thing—a kind of all-pervading formlessness. No doubt it is partly due to the atmosphere—nothing has a clear cut or definite shape. But it is also apparent in the human stock.

Do not think I am being so foolish as to deny that there are delights for the eye in England. In the days when our critics were in bondage to France, our lack of formal sense seemed an absolute condemnation of our arts. Yet there is a lot to offset that. There is to begin with our remarkable sense of nature, which is often the basis of an unconscious poetry. If we cannot produce the absolute perfection of the Place de la Concorde, we contrive to avoid the absolute aridity of a French mairie. And this leads me to the first point I should like to make. I believe it is impossible for us to produce large formal, logical units, and to do so will merely be to invite dullness and pomposity. Our forte is the informal, the natural, the poetical and the picturesque. We are all so accustomed to the beauty of English villages and leafy country towns, that we are a little bored by them. Let me assure you, as one who has spent a good deal of time out of England, that they really are a unique and precious expression of the English spirit. And for that reason I would like to put in a word for that rather unfashionable creation, the garden city. No other country could have thought of the idea, for in no other country does the word garden carry with it the same rich associations. The garden city was an invention of genius, and one far more likely to succeed here than the more up-to-date Tel Aviv style.

Some of you may have seen a book published recently, by a very distinguished critic of architecture, called *Castles on the Ground*. I am far from following the author all the way. I do not think that the half-timber, pebble-dash tomato-brick suburban house in its bayleaf shrubbery is a satisfactory form of architecture, simply because it fulfils the imaginative needs of the average Englishman. But I do understand how the author, writing in the barren, blazing, dusty surroundings of the Middle East, should have seen a new beauty in those damp, green drives and red brick porches. And I do believe that we must have some such notion of the English scene in our minds when we try to improve English taste. Like anything else, this kind of architecture can be done well or ill. In most suburbs it is done ill, and we instinctively feel that the remedy is to do something different: but the real solution is to do the same thing, only better.

Granted that we recognize the general character which the English express in their surroundings, the question arises, how are we going to get it at its best In an art which depends on logic and order, it is relatively easy to give rules. But in an art which depends on sentiment, variety, association and a general harmony of composition, rules are of very little help, and we have to depend on experience. So what we require is a rich visual experience, enjoyed, analysed, remembered. We must keep our eyes open, not only for designs which are beautiful in themselves but for complete visual effects which are harmonious and satisfying. Here I must say a word about the splendid work done by the ARCHITECTURAL REVIEW in helping us discover new kinds of visual beauty. It was that periodical which first analysed the merits of seaside architecture, which first pointed out the beauty of cut glass public house interiors, and has consistently shown how the use of colour washes and of variegated lettering on shop signs may create a beautiful street It is a pictorial, or in a true sense a picturesque approach, and can be much helped by looking at architecture through the eyes of painters. And if we look carefully at pictures of English architecture from Cotman to Mr. Kenneth Rowntree, we shall be astonished to find how much of what we admire is due to features which, architecturally speaking, we should have considered quite insignificant, or even objectionable—the texture of lace curtains or the peculiar size of a sign-board, for example.

This approach to visual beauty through nature, association and the apparent accidents of the picturesque, seems to me well suited to our national temperament. But it has one great danger; it leads to a gradual lowering of standards. We begin to feel that if beauty depends on a series of happily contrived accidents, then there is no need to bother too much about design. If the effectiveness of a house depends on painting large purple bands round the windows, then what is the point of taking trouble over the mouldings? If a monstrous, floriated type happens to make a pleasant patch of ornament in a village street, Irvine Gill and Johnson lived in vain?

The obvious truth is that both approaches are necessary. To approach simply from the angle of design is to produce drawing-board architecture, without life or flavour. To approach solely from the picturesque point of view is to produce slop. The eye soon rebels if it cannot come to rest on a well-designed detail or well-proportioned façade. It is part of the eternal balance between vitality and order which underlies all art. In England, where the sense of ordered form is not in our blood and atmosphere, it can never by itself give us complete satisfaction. The balance must incline the other way. But if it goes too far the other way, we shall relapse with aimless provinciality. In the great ages of visual expression in this country, men not only knew how to set their buildings among trees, and streams, and plots of grass; but they knew by tradition, and by pattern books, how to space out the windows, what moulding to put beneath the eaves, how to finish the coping of a chimney—and a thousand other details which are forgotten today—and our architects are too materialistic and too busy filling in forms to rediscover them.

So that while we look out for general effects, and try to analyse how they came about, we must also keep a vigilant eye on detail and proportion and see that it is well contrived. I say vigilant because I think that only a widespread critical attention can save us from the present degradation of architecture. Please do not be bamboozled into thinking that architecture is something so difficult and mysterious that a layman cannot express an opinion on it. Of course uninformed opinion is useless on any point, but, as you all know, some of the greatest English architects were amateurs who took pains to learn something of the art from the best sources, and, although we could not all design Castle Howard, we could all learn enough to cast a critical eye on the buildings which are growing up around us.

Now we may agree that the only way to develop an understanding of fine architecture is to train our eyes on the best examples; but if we are to develop a real critical sense we must get in the way of looking attentively at *all* the buildings which surround us. As we wait in a block we must analyse the buildings in the street, see where the various elements which make up the design have been taken from and how they have been combined. We shall get some shocks—also some rewards. Then, when we have to wait in a station or in a public building, we can spend the time profitably by looking at the detail, and even making drawings of anything that strikes us. Even those of us who think ourselves normally observant will be embarrassed when we come to draw an architectural composition or detail, and realize how little, in fact, one does observe until one has to. Of course it doesn't matter what one's drawings look like—it is the concentration on a point of vision which is important. But I would suggest that the

model for this kind of amateur architectural observation is to be found in the drawings and etchings of Cotman. It is only when one comes to draw that one realizes the kind of problems which architecture involves—or rather I should say, used to involve, for a good many modern architects seem to be unaware of them. How a column fits on to an entablature, how a moulding turns an awkward corner, how to relate an upper and a lower row of windows: in drawing we suddenly realize how important these questions are—and how much thought and inherited knowledge went to their solution.

However, I suppose I am advancing an impossible ideal. Very few of us have time to draw the architecture which surrounds us, and I will therefore suggest a lazy man's substitute: the film. The film is an ideal means of teaching us about architecture, and up to a point it has been used in this way, especially in France and Italy. But it has been confined to great buildings—cathedrals and palaces. What I should like to see is a series of films which went along ordinary streets, and pointed out what each building meant architecturally. Whenever a point needed clarifying, it could be done by a diagram; and in this way it would even be possible to show how a bad design could be improved. The same could be done for the village architecture in which, as I said originally, we excel. But whoever did these films would require wide sympathies; and they would have to play fair. All recent films on planning have shown Victorian buildings on wet days, and modernistic buildings on fine days. I wish some fair minded person would illustrate an article with modernistic buildings photographed on wet days when the plaster has begun to peel off and the paint gets shabby, and the stainless steel has grown dull. Please don't think that I am prejudiced against modern architecture—only I am shocked by the dishonest propaganda by which it has been supported. And I can't help seeing that, although in the hands of a sincere architect it can produce bracing results, it encourages the speculative builder to exploit simplicity in the interest of economy.

Book Reviews

Charles Canning Winmill: An Architect's Life by his daughter. 4to. xvi+148 pp. J. M. Dent & Sons. 1946. 15*s*.

C. C. Winmill was a friend of Lethaby and of Philip Webb and so belonged to what we think of now as 'the Morris tradition'. As time goes on the strength and integrity of that tradition begin to take on a heroic aspect. Is it not almost the only thing of absolutely sterling worth in the architectural history of the last hundred years in this country? However we assess it, it was at least sincere and influential and the biography of one who participated in it is a welcome addition to architectural literature.

Winmill was born in 1865—a generation after Morris and Webb. He went to Christ's Hospital and was later articled to John T. Newman in the City. While with Newman he attended classes at the A.A., where E. J. May was then the most popular of the visitors. In 1888 he joined Leonard Stokes, with whom he spent 'four good and happy years', and in 1892 entered the L.C.C. architect's department. With his work there he combined, from 1898, a keen interest in the work of the S.P.A.B. where Thackeray Turner, Lethaby, C. R. Ashbee, and, of course, Webb, were among his colleagues.

At the L.C.C., Winmill worked first on housing schemes and later, with Mr. Owen Fleming, on fire stations. In those days nobody looked to official architects for brilliance or novelty and the excellent performances of L.C.C. architects before the first world war are now altogether overlooked. Yet the work done then, with little or no recognition, was some of the best of its time and Winmill's fire station in Eton Avenue is a delightful building in every way. It was his principal work and remains his appropriate monument, as well as a substantial witness to the meaning of 'the Morris tradition'. Winmill retired from the L.C.C. in 1923 and took to private practice, repairing churches and building a few houses. He died in 1945.

Miss Winmill's biography is modest, careful and sincere—a good piece of craftsmanship in which her father's personality is clearly portrayed. His letters, of which Miss Winmill makes judicious use, have something in common with Webb's inimitable and musical style. The illustrations include plates of Winmill's principal works and, in the text, reproductions of some of his delicate pencil sketches. J. SUMMERSON [4]

English County, A Planning Survey of Herefordshire, by the West Midland Group on Post-War Reconstruction and Planning. 4to. pp. 265. Faber & Faber. 1946. 21*s*.

County Town, A Civic Survey for the Planning of Worcester, by *Janet Glaisyer, T. Brennan, W. Ritchie* and *P. Sargant Florence*, prepared for the Worcester City Council. 4to. pp. xii+319. John Murray. 1946. 21*s*.

The surveys of the County of Herefordshire and of Worcester City should be read and considered together. Both studies have the same purpose: to present the factual basis for the preparation of physical planning schemes and, further, to test and to demonstrate the technique of planning surveys. For this reason alone, these two books are most topical. According to the new Planning Bill, it will be the statutory obligation of planning authorities to conduct surveys prior to preparing plans. Yet experience of survey methods and, in particular, of the application of survey results to planning is still very limited. Through the publication of these two examples, the relevant knowledge has been greatly advanced.

The two surveys are alike not only in purpose, but also in design. Some of the authors worked on both teams, and there is considerable similarity of scope and of methods. The variations which occur are conditioned chiefly by the difference between the territorial units of investigation. The study of an individual city necessarily has to be more detailed than the study of a county. This similarity of approach in itself is of considerable value. Whilst the results of previous surveys, conducted along different lines in various parts of the country, could often not be co-ordinated, the Herefordshire and Worcester findings are comparable.

The major contribution of these two books is their illustration of survey scope. The fields of enquiry in the Herefordshire report include the geographical background, climate, land resources and land-use; population trends and distribution; economic structure, industry and agriculture; housing, public and social services, communications and amenities; the pattern of settlements and their interdependence; the relationship between town and country. The same aspects are considered in the Worcester survey, though the emphasis on them is differently distributed. Through the investigation of these different subjects, the West Midland Group, in particular, who conducted the Herefordshire survey, provide a valuable list of planning factors. The relevance of each of these to planning is clearly interpreted, and the presentation both of textural and pictorial material is admirable. In fact, with certain qualifications, the Herefordshire study may be regarded as a model for a County planning survey.

The qualifications which might be made are firstly due to the fact that the West Midland Group undertook their study as a project of planning research; they were not commissioned to prepare an actual plan. Therefore, the direct application of survey results to an outline plan, an example of which is so urgently required, is inevitably lacking. Secondly, both the emphasis on, and the methods of investigation of, the different aspects considered are rather uneven, though this again is a difficulty which can hardly ever be avoided in large scale research projects of this kind. The chapters on the physical and on the economic features of the County answer all the questions we might wish to ask. The treatment of the old problem of the 'balance of industries', in particular, that is, of their selection and location, is excellent. On the other hand, the description of the people and of their social environment is sketchy. The section on 'The People' deals only with population structure and trends, but not with social stratification. The classification of houses, from the point of view of obsolescence, is hardly reliable, as it is derived from a visual survey only, without detailed reference to structural condition, housing services and siting factors.

However, such criticism of particular features of the Herefordshire report are insignificant, as compared with its general positive contribution. Similar criticisms apply more strongly to the Worcester survey, which also was not directly related to a plan. Both in technique and presentation it is the less successful of the two, though this may partly be due to the fact that its investigations were more detailed, and hence the analysis of all the results was an even more laborious and difficult task. The various sections are presented in a formalistic manner. The individual facts are listed rather than interpreted and correlated. The report gives a picture of a town and of its surrounding area in which the people who live there are barely visible. Their environment and their institutions are described, but their social and territorial grouping, their social life and their daily movements remain obscure. These omissions are the more evident as the original design of the Worcester survey clearly included the consideration of all the relevant aspects: physical, economic and social. A representative sample of local households were interviewed, questionnaires were sent to manufacturing industries and to social organizations. The raw material for a more comprehensive analysis thus was available. But the task of fact finding is always far easier than the final sifting of results. In reading the Worcester report, students of survey technique will recognize this difficulty and perhaps learn to organize their future work accordingly. Indeed, they will find that from this, as well as from the Herefordshire report, they can derive many other lessons, mostly for immediate positive application, which had not previously been presented. RUTH GLASS

Fife Looks Ahead. Report of the Fife County Council Planning Advisory Committee. 4to. pp. (xv)+235. Edinburgh: C. J. Cousland & Sons. 1946. £1 1*s*.

This report by a Planning Advisory Committee appointed by the Fife County Council reviews all aspects of the future planning and development of the County of Fife and wisely stresses the necessity for ensuring flexibility and the avoidance of a multiplicity of detail which would complicate future issues.

Mountain, heathland and land under crops and grazing comprise 80 per cent of the total area of this fertile county and especial attention is given to measures which will ensure the progress of agriculture. Recommendations are made for the creation of village centres to house agricultural workers, the establishment of training schools for future farmers, and the development of an adequate road system.

It is surprising to learn that almost half of the Scottish coal output is provided by Fife. Four new shafts are proposed and it is estimated that, including the replacement of existing houses, a total of 8,000 houses is required to accommodate miners.

A new town at Kennoway planned by the County Council and already under construction is designed for a population of about 10,000 and will probably provide a large proportion of the houses required for mine workers.

In Fife the housing situation is as acute as elsewhere and this problem is fully considered. In order to achieve co-ordination between the 26 different housing authorities it is suggested that there should be formed a County Housing Association representative of county, burgh and other appropriate interests. The two examples of council houses illustrated are un-Scottish particularly the urban type which is typically dull.

Greater diversity of industry is required and to this end the Report suggests, among other measures, that a County Industrial Development Council be set up to enable prospective industrialists to obtain particulars of what the county has to offer in the way of sites and services, etc.

Education, public health, amenities and other necessary considerations are dealt with, including the pressing problem of river pollution.

The County Council is recommended to urge forward by all possible means the construction of the Forth and Tay Road bridges. One feels that the design for the Forth Road Bridge, as illustrated on the frontispiece, falls far short of the possibilities offered. ANDREW RENTON [*A*]

French Tapestry. Edited by *André Léjard.* 4to. pp. 107. Paul Elek. 35*s*.

For many centuries the French have woven tapestries as the English have written poems, as the ancient Egyptians carved monumental statues. The medium has been a necessity for the full expression of the national genius, for, while the French have excelled in many arts, the tapestries are not a by-product of some other excellence. They are a central element in the French artistic tradition. We welcome a book in which the French authorities of our day collaborate to chronicle the rise and fall of the workshops and to comment on the achievements of the long tradition behind them.

We have seen recently a majestic epitome of this tradition at the Victoria and Albert Museum, where the earliest work, the series of the Apocalypse from Angers Cathedral, that overwhelming mediæval masterpiece, opened a history that is still continuing with the exciting revivals of the present decade. The Angers series, if the earliest survivor, is a work so advanced technically and so assured in convention that it argues a long unwritten history of weaving in France before those last years of the 14th century. After it the history is sufficiently documented.

There were in fact two serious periods of decline, if not complete breaks in the tradition. The first, apparent in the 16th century when the supremacy passed from France to Flanders, was halted by the initiative of Francis I in founding the workshop at Fontainebleau and finally overcome by the establishment, over a century later, of the Gobelins factory, which within a few years over-rode all foreign competition. The second decline, in the 19th century, was caused not by economic stress so much as by a complete destitution of artistic standards which only in our own day have been rehabilitated.

What interests us today in the fluctuating fortunes of the tapestry workshops is the light thrown on one of our own problems, that of official and state patronage of the arts. The whole history amply repays our study. While royal initiative and state patronage made possible the revival of the 17th century, state direction and official taste appear equally responsible for the 19th century decline. Official patronage does seem to have had a great deal to do with the debasement of weaving into a medium of reproduction.

Francis I wished to be able to carry with him on his journeys his newly formed gallery of pictures at Fontainebleau and ordered from his workshop replicas in tapestry not only of the paintings but of the frames, mouldings and architectural ornaments surrounding them. In 1794 the National Convention decided that 'all pictures having received national award by the Jury des Arts shall be reproduced in tapestry at the Gobelins.' Aesthetic standards disappeared in a frenzied research into the possibility of producing from synthetic dyes the innumerable tints needed to reproduce the effects of oil painting. A revival was needed.

This book suggests only too clearly that some of the later efforts may be equally misguided. Tapestries carried out by Mme. Cuttoli at Aubusson are copies of paintings by Braque, Picasso and Rouault almost indistinguishable from the originals. If these are better than the 19th century products it is surely only that our contemporaries are more acceptable artists than the prize-winners of the Jury des Arts. However the work in the last few years of Lurçat and others who are developing a series of decorative conventions and symbols, not based on painting, and are severely restricting the range of tints and other technical means, offer possibilities of a return to real tapestry after a long period of excessive dependence on the painted picture.

M. Verlet's essay on 'Tapestry in Interior Decoration' is delightfully suggestive of uses to which tapestry may be put, not only as a portable luxury but as portable architecture. One imagines tapestry pavilions set up on the lawns of Hampton Court for Government receptions to distinguished visitors. Most of the articles discuss the work of the various factories in an historical summary. In all of them great learning is carried so unpretentiously and so much factual information so admirably sorted out and presented that they are a pleasure to read. The translation is excellent.

The same is not true of the illustrations. The colour plates are deplorable; the rest are often too small to be of any interest except for identification. It is not easy to tell whether one is looking at the cartoon for the tapestry or the tapestry itself. At the price a less mean looking cover should have been provided. WILLIAM TOWNSEND

Highland County Plans. County Council of Ross and Cromarty. 4to. pp. 19. Dingwall. 1947. 2*s*.
The County of Ross and Cromarty spans the Northern Highlands from the East coast to the west, and includes also, across the Minch, the Island of Lewis. Much of the land consists of crofting areas, where the large majority of the houses are by normal standards unfit for habitation. Large in area, the population is small and is tending to decline. The County Council very wisely obtained the views of two Planning Consultants, and in this interesting booklet sets out its proposals to improve conditions for farming, fishing, forestry, tourists and weaving.

Technical Drawing for Trade Students, by *Raymond Forbes*. 4to. pp. vii + 124. B. T. Batsford Ltd. 1946. 6*s*.
Unlike many works which assume that the student already has some knowledge of the subject, this book, intended for trade students, deals with the basic principles of technical drawing; it includes useful lessons and exercises in logical sequence.

Correspondence

OPPORTUNITIES IN INDIA FOR ARCHITECTS

Sir,—I was disappointed that 'Overseas Appointments for Architects' contained no reference to India, but coming on leave I find that not much is known about the circumstances of the Britisher in India at the present time. In all the recent disturbances there has been nothing anti-British, in fact our presence has, at times, been very welcome.

Recruiting for the regular cadres in the Services has ceased but appointments of specialist officers, including a few architects, are still being made for a term of years.

India is setting out on a programme of industrialization. She wants to manufacture what she previously imported, but has got to import the machine tools to make the goods and she needs the specialist to teach her how. There are probably more openings for technical experts than ever before. The private practitioner is now coming into his own. India is behind hand in all technical education so there are not enough Indians to fill the higher posts. As far as architects are concerned there is only one School of Architecture, that in Bombay, which has a complete course and grants a diploma and the average number who qualify is about 20 a year; this from the whole of India! The result is that the few British firms of architects have all the work they can cope with. The Indian makes a good client in my experience and he relies on his architect to save him from the rapacity of the contractor. The quantity surveyor is also in great demand as the client is keen about costs, but the private quantity surveyors are few and far between so architects have to do their own quantities.

I am home on short leave hoping to recruit some more staff so you may think I am prejudiced but I have had twenty-nine years of private practice in India and I go back joyfully for a few more. It is a very good country to work in—jobs are big, though costs are low, and three or four months leave in 'Blighty', every three or four years, is very, very good. But if you are to be happy in India you must make a home there and make friends with Indians. Yours faithfully,

C. G. BLOMFIELD [*F*]

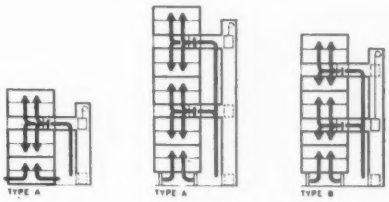
MAISONETTE FLATS AND NOISE RISK

Sir,—In the paper 'Planning Against Noise' referred to by Mr. Hope Bagenal in his stimulating analysis of noise in maisonette flats (June JOURNAL), I put forward a suggestion for yet a further refinement of the inverted maisonette. This consisted of interposing a buffer storey between each set of contiguous living rooms, the buffer-floor to serve for access, pram storage, box space, utility and play space.

This type of plan gives a unit of five floors served from one lift point, the dwellings being approached up or down by private staircase from the access level. It eliminates impact noises through the floors of living rooms entirely and the limited amount of access corridor can be economically treated to eliminate impact noises from this source too. Such a plan gives a very high degree of privacy, inasmuch as no rooms whatever are overlooked from the access corridor which, in ordinary flat planning, is little better than a public pavement opening directly into the dwellings. Since there is a reduction in the number of lift stopping places, a better lift can be arranged; a ten-storey block is served from two access levels.

It might be thought at first glance that such considerable advantages could only be gained at great expense since there are additional floors to be added to the cost of the building. Nevertheless, we believed this type of plan well worth looking into, for, if it could be economically arranged its advantages were obvious and we developed an experimental scheme on this basis which we submitted in the Pimlico flats competition. We scarcely expected that such an unusual scheme would win a competition, but we were keen to find what the reactions to it would be. The interest it stimulated prompted us to carry on. In this first scheme there were still some points of planning that needed ironing out, but we have since developed a plan (which we have called Quadruplex, an extension of the term Duplex) which should overcome the expected criticisms due to the sheer novelty of the approach and which yet can be built as economically as orthodox flat or maisonette types.

Those who travelled in Sweden or Switzerland last year must have felt as we did when we saw, with new eyes, on our return, the drab, orthodox, insufficient examples of working class dwelling currently being built here that a now infusion of life was needed. This drabness is not all due to austerity. It is of great significance, therefore, when two such authorities as



Edward Armstrong and Hope Bagenal express themselves as favouring bold experiments in the planning technique of multiple dwellings. The inverted maisonette is but one approach of many.

Has not the edict gone forth—lifts in all dwellings above three storeys? But why should we persist in using the same plan types for dwellings with lifts often eight or ten storeys high, which were developed for liftless dwellings of not more than five storeys. Lift access requires an entirely new planning technique. If you instal lifts in staircase access flats it costs you upwards £80 per flat. For this you get a minimum four-person lift that will not take a pram, you get a slow service and if your lift breaks down or is being serviced you've jolly well got to walk. In Quadruplex we can supply lifts at £20 per dwelling. We use lifts big enough to take a pram. There is always an alternative lift available if one is out of action and the service is quicker. Here is a table analysing comparative lift costs and service values for several types of dwelling and for ten-storey blocks :—

	Service time in minutes	*Max. Nos. dwellings served per lift*	*Min. capital cost per standard dwelling*
Quadruplex ..	3¾	80	£20
Staircase access flats*	4½	20	£84
Maisonettes ..	4¾	60	£28
Balcony access flats	6	50	£43

* Four-person lift. The others are for eight-person lifts.

May I, as a last point, remark on the barbaric practice of placing the pram shed in the yard. Surely, this is simply a failure on the part of architects to devise plans which enable the prams to be taken upstairs. In Quadruplex we take the pram up to the house, where it rightly belongs, just as we take all other commodities up to the house, including a not insubstantial garden. We can say 'house' without blushing because the dwellings have really become elevated terraced houses of much the same order of amenity. Yours faithfully,

D. DEX HARRISON [*A*]

Review of Construction and Materials

This section gives technical and general information. The following bodies deal with specialized branches of research and will willingly answer inquiries.
The Director, The Building Research Station, Garston, near Watford, Herts. Telephone: Garston 2246.
The Director, The Forest Products Research Laboratory, Princes Risborough, Bucks. Telephone: Princes Risborough 101.
The Director, The British Standards Institution, 28 Victoria Street, Westminster, S.W.1. Telephone: Abbey 3333.
The Technical Manager, The Building Centre, 9 Conduit Street, W.1. Telephone: Mayfair 8641-46.

The R.I.B.A. badge reproduced by Copycat process

The Miles Copycat. Gone are the leisurely days when the first job of the junior member of an architect's staff was to rub down Indian ink from a stick; now the desire is to avoid the time taken in tracing in ink, if possible, but with the usual printing process the reproduction of a pencil drawing is not always good. During the war Miles Aircraft Ltd. invented a non-optical method of reproduction suitable for any document or drawing; this they did for their own departmental purposes, but the process was so satisfactory that the company have now put it on the market. Reproductions can be either black line on a white background, or *vice versa*, except that when there is printing or a drawing on the back of the sheet to be reproduced, or the original is on opaque paper, it is only possible to produce a black line on white background, as a negative has first to be made. The main equipment includes the electric light printing cabinet; developing, fixing, and washing trays, a mechanical drier, and, of course, the sensitized printing paper. The time required to make a negative and produce the first positive is eight minutes for a sheet 42 in. by 32 in., but subsequent prints from the negative can be made at the rate of some 40 an hour.

Available sizes of equipment are the standard model, taking documents up to 18 in. by 14 in.; the Imperial model. 30 in. by 20 in.; and the Delph, 42 in. by 32 in. The running costs for paper, development and fixing are about 2*d.* a sheet foolscap, and 4*d.* for 18 in. by 14 in. Approximate prices for the main equipment are £113 for the standard model, £133 for the Imperial, and from £180 to £210 for the Delph model, according to the kind of drier and ancillary equipment selected. As pages from books up to 4 in. thick can be reproduced, the usefulness of the process in connection with copies of valuable books or documents is obvious.

The R.I.B.A. badge, shown on this page, is printed off a block made from a Copycat reproduction of the badge as it appeared in a previous issue of the JOURNAL.

The Alcrete House: A year ago we published an article on the production of A.I.R.O.H. aluminium single-storey houses by the Bristol Aeroplane Company. At that time it was rumoured that a two-storey permanent house was under development. We rather expected this design to follow the lines of the single-story house in consisting of 'fully fashioned' units able to go together in six or eight parts as does the aluminium house in four. This method has however not been followed in the Alcrete house—as the new design is called—possibly because of transport difficulties, low bridges in particular, and problems of hoisting upper units. Instead the house is constructed of flat wall sections which go together more or less round a centrally placed heating and plumbing unit and some completely prefabricated wardrobe units.

The house contains relatively much less aluminium than does the single-story design. Although aluminium is one of the few materials which has not risen in price it is nevertheless costly enough to call for economy in design. The wall and partition units consist of aluminium frames infilled with aerated concrete and are similar to those in the single-storey house except that the external wall surface of the lower storey panels is of exposed concrete aggregate, that of the upper storey being of aluminium sheet.

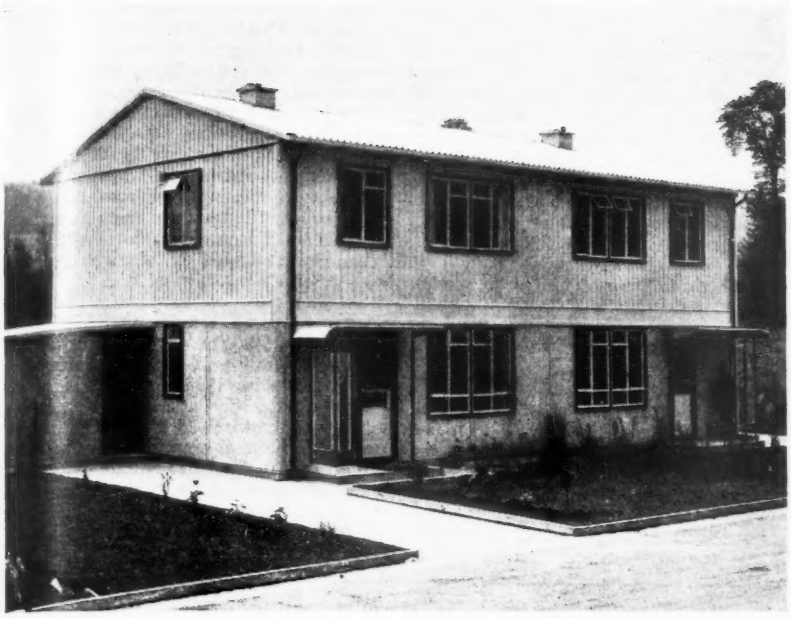
One would expect the house to be of framed construction, but in fact the wall panels are load-bearing, the aluminium frames serving mostly to contain the concrete and to allow accurate assembly. After the ground floor wall panels are fixed on a concrete site slab, precast concrete wall beams are placed on top and these carry joists, similar to timber joists but of precast concrete. On these joists are fixed floor slabs consisting of trays filled with sawdust-cement flooring; ordinary boarding can be used as an alternative. This makes a working platform for fixing the upper wall and partition units, after which the roof is fixed. This is in five prefabricated sections consisting of aluminium trusses carrying aluminium alloy ribbed sheeting which has bitumen felt fixed beneath to prevent drumming. Thermal insulation is provided by a glass silk blanket. The hull of the house is erected in two days, after which finishing can be done under cover.

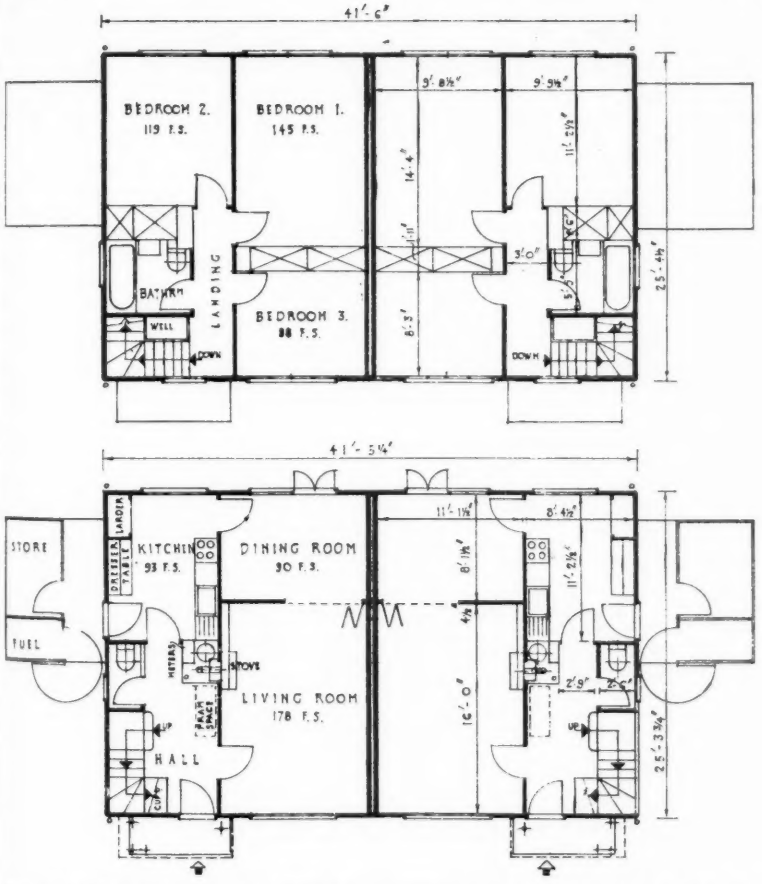
The heat service unit arrives complete and is the first item to be fixed, being hoisted into position by an ordinary chain block and tackle. It has a steel frame and is semi-load-bearing. The unit houses all the plumbing, tanks, slow combustion stove, gas and electric meters and the one-pipe drainage. The wardrobe units are the most complete we have yet seen, containing drawers and small cupboards as well as full-length hanging space.

The design has been approved by the responsible Ministries and the structure accords fully with the requirements of the Burt Committee on thermal insulation, sound insulation, fire-resistance (including the party walls) and weather resistance. The architects are Messrs. A. F. Hare [*A*] and Partners.

The design has one merit not possessed by other systems of prefabricated housing, namely, that it allows of considerable variations in plan types by using different sizes and shapes of wall panel. At the Press view we saw designs for a four-bedroom detached or semi-detached house, for a terrace consisting of four three-bedroom and two four-bedroom houses, and for pairs with linking walls and outhouses. Considerable variation within the house plan itself is also possible so that all the 'ways of living' suggested in the Housing Manual can be met. For instance, the ground floor plan can have a parlour, living-kitchen and utility; or it can have a large kitchen with dining recess, plus a large living-room; in fact, the ground floor can be sub-divided in several ways because the interior partitions are non-structural.

Alcrete Activities. The foregoing brief description of the Alcrete house shows one of the activities of the large group of interests which is using five war-time aircraft factories to produce units of housing. The operative firm of the group is Structural and Mechanical Development Engineers Ltd. They began with the aluminium house for the temporary housing programme. By the end of 1947 the five factories will have produced 54,000 houses or at the rate of one every three minutes. This gives some idea of the scale of operations. The Alcrete two-storey house and its variants described above, is a second step. Tropical single-storey hostels are also being produced and arrangements are being made for two assembly plants to be erected overseas.





Photograph of the prototype pair of Alcrete houses and their plans. The core of the plan is the heat service unit which includes wastes and meters. Partitions are non-structural and can be varied

Perhaps the most surprising development—still in the design stage—is that of fully-prefabricated ten-storey flat dwellings. On this project the S.M.D. Company (to give them their short title) say 'Following successful tests on a frame representing two storeys of a ten-storey building, two prefabricated eight-storey blocks are to be built. The multi-storey frame construction, which we have developed, uses only one-sixth of the amount of steel used in a normal steel framed building. We envisage that all the main units, including frame, walls, roof and services will be prefabricated in the factory. The complete eight-storey building could, we believe, be erected in ten weeks on the site.' Other developments envisaged are prefabricated school buildings and assembly halls. The keys to this rather staggering development are the use of a special aerated concrete and a light alloy framing handled by a group of skilled technicians (which naturally includes the architects Messrs. A. F. Hare & Partners), backed up by an enormous productive capacity.

There are still many architects and members of the building industry who say that prefabricated construction is but a temporary expedient created by the housing shortage. A glimpse, such as we have had, of the operations of S.M.D. would rather shake that negative and complacent attitude. Here are experienced manufacturing interests expending large capital sums on huge plants to manufacture units of housing, not only for the home market but for export as well. The products are not shoddy or ugly, nor are they grimly standardized; they are as efficient as science can make them and they can be varied in form and colour at least to please average tastes.

While the building industry is arguing about incentives to output and whether a man can lay 500 bricks a day, or whether a plumber should be allowed by his union rules to cut a hole in a floor, this group of firms is harnessing machinery to its purpose, regardless of long-established building trade restrictions and customs. This new development is still young and not yet quite free from teething troubles; the products are still somewhat costly. But if mass production in other industries is any guide, costs will come steadily down as production rises; traditional building *may* find itself producing an article the public finds too expensive. This more than anything is likely to shake the building industry into action towards making a real effort to achieve economy in production—an effort which it has hardly made as yet.

But this discussion is getting into the unsafe field of prophecy. It is sufficient to point out the facts—observed by only a few technical journalists, so far as the building industry is concerned—facts clearly indicating that the promoters of this work and their experts are not gambling with something they do not understand. And we may assume that they have not embarked on a huge productive programme without having previously assured themselves that their products will find a market more or

less indefinitely. The impact (not too strong a word) of this development on the traditional building industry is likely to be anything but slight.

The Fulmer Research Institute. The days of trial and error of materials, on the job, have passed, trial now takes place in research laboratories. Of these there are very few to which the private individual can send specimens to be tested, or in which he can sponsor investigation. The Fulmer Research Institute sets out to fill the void. It was declared open by Sir Stafford Cripps on 2 July and it is now available to all—Government, corporations and private firms. The Institute is housed in what was a private house, at Fulmer near Slough, and although it is not yet fully equipped it already possesses a sufficiency of first-class apparatus for embarking on research. At the moment the Institute is concentrating on metallurgical and allied problems, and deals with microchemical analysis, metal extraction and refining, corrosion and plating; spectrographic and X-ray analysis, and mechanical testing; experimental casting, metallography, heat treatment and refractories. Workshops provide for making experimental equipment. At the Institute independently sponsored work can be carried out confidentially, the results, and any patents arising therefrom, remaining the property of the sponsor. The Institute does not distribute profits, any excess of income over expenditure being devoted to extending its services. At the opening, visitors saw work being done on aluminium and its alloys, materials now very much to the fore.

Atmospheric Pollution. The Department of Scientific and Industrial Research are conducting experiments to ascertain the comparative concentrations of sulphur dioxide in the air at ground level, and also at a height. For this purpose instruments have been set up at the Houses of Parliament, one on the ground at Speaker's Green, and another on the top of Big Ben Tower, at a height of some 238 ft. It should be interesting to compare the two readings, not only with each other but also with tests made in previous years, bearing in mind that sulphur dioxide results from the combustion of coal. The choice of the precincts of the Houses of Parliament is not connected with the effect of sulphur dioxide on the Anston stone used in the buildings there, but was made because the tower provides a convenient opportunity for setting up an instrument at a height above the ground, as one of the objects of the investigation is to see whether a concentration which would remain at ground level is dispersed by winds at a height. The tests are being carried out for the Atmospheric Pollution Research Committee of the Fuel Research Board of the D.S.I.R.

B.S.I. Standard Specification 970 : 1947. Wrought steels (En series). This specification, recently published, is a revision of the one issued in 1942, and deals with some 90 wrought carbon and alloy steels in tensile strengths from 28 up to 100 tons per square inch. As a comprehensive schedule of the steels used throughout the general engineering industries, it should be of interest to all users of steel. It can be obtained from the British Standards Institution, price 10*s.* 6*d.* post free.

Practice Notes

Edited by Charles Woodward [*A*]

IN PARLIAMENT. War Damage Repairs. Asked what steps are taken to ensure that the repair of war damage is efficiently performed when it is paid for by the War Damage Commission, the Financial Secretary to the Treasury replied: The responsibility for seeing that war damage repairs are properly carried out rests upon the building owner to whose order the works were executed. A cost of works claim upon the War Damage Commission may include the appropriate fees of an architect or surveyor employed by the claimant to supervise the execution of the work and to see that it is efficiently performed. The Commission cannot accept liability for the cost of remedying defective workmanship. (9 June 1947.)

Building Repairs. (Licensing.) Asked the number of licences and their value that have been granted for building repairs by his Department during the last monthly period for the London region; the number of licences and their value granted by the local authorities in the same period in the London region; and in each case, respectively, the amounts for housing and non-housing repairs, the Minister of Works replied: During April last my Ministry issued in the London region 3,719 licences totalling £2,368,011 in value for repairs. £2,343,730 was for non-housing and £24,281 for housing repairs. During the same period, local authorities in that region issued 32,112 licences for repairs totalling £2,748,955 in value of which £2,526,045 was for housing and £222,910 for non-housing work. (9 June 1947.)

Protected Buildings (lists). Asked whether he expects to publish before the Summer Recess any of the lists of buildings of historic or architectural interest to be protected under Sections 42 and 43 of the Town and Country Planning Act, 1944, the Minister of Town and Country Planning replied: It will not be practicable to publish any of the lists before the Summer Recess, but I hope to do so in the early Autumn. (10 June 1947.)

Bankside Power Station. Asked as to the elimination of sulphur fumes from the proposed oil-fired Bankside generating station and to the elimination of noise, the Minister of Town and Country Planning replied: I am satisfied from the advice I have received that sulphur and other noxious fumes can be eliminated. In order to ensure that the design of the plant to be installed is satisfactory, a pilot gas-washing plant is to be constructed, and, when the results of this are available, the Electricity Commissioners will consult with my right hon. Friends, the Ministers of Health and Works. I shall keep in touch with these discussions. As regards noise, the Electricity Commissioners imposed a condition in giving their formal consent that the undertakers shall provide efficient methods for ensuring the avoidance of noise, and I have no reason to think that any difficulty will arise. (10 June 1947.) Asked whether he would consult the Royal Fine Art Commission regarding both the design of the new power station and its suitability for siting on the Thames at this point, the Minister replied: The site of the new power station on the south bank of the river has been decided and I do not propose to reopen the matter. The Royal Fine Art Commission will be consulted on the design of the building. (10 June 1947.)

Selling Prices. Asked if he would consider controlling the selling price of small houses built before the war, in view of the fact that in many cases a 300 to 400 per cent increase in price is being asked for houses which cost under £1,000 before the war, the Minister of Health replied: The general subject was considered by the Inter-Departmental Committee on the Selling Price of Houses whose report (Cmd. 6670) was published in August 1945. In view, however, of the practical difficulties involved, to which the Committee themselves drew attention, there is at present no prospect of legislation to implement the recommendations they made. (10 June 1947.)

New Houses (Selling Price). Asked whether the recent increase of £100 in the licensing limit for the price of new houses is to be made retrospective to a particular date; and whether any such instructions have been issued to local authorities, the Minister of Health replied: The maximum permitted selling price is specified in the licence for the building of the house and local authorities were informed in the circular issued on 25 February that the new conditions as to selling price and standards of building would be applicable to licences issued after the date of the receipt of the circular. (13 June 1947.)

Air Raid Shelters. (Demolition.) Asked to whom owners of property should apply for the cost of demolishing air raid shelters which were erected compulsorily, under statute, upon private land, the Secretary of State for the Home Department replied: Any question in connection with the demolition of shelters provided by local authorities for the protection of the public, whether upon private or public land, should be addressed to the local authority responsible for their erection. Asked further that as some of the shelters are rather large and were put up compulsorily and that the cost of demolition is rather heavy and that the

space is required for houses and factories, would the Minister see to it that the cost is borne by someone else instead of it being on the shoulders of private employers, the Minister replied: If the persons concerned make application to the local authority, they will then ascertain whether the local authority, as is the case in some instances, is responsible for the demolition. (19 June 1947.)

Architectural Drawings (Examination). Asked if he was aware that practically every set of ordinary architectural or housing drawings now submitted to Government Departments for approval is examined by not less than four separate groups of Government-employed architects, each group having the right to require alterations; and if he will take steps to end this waste of money and delay caused by this duplication of effort, the Minister of Health replied: No, sir. If the hon. Member has particular cases in mind I shall be glad to look into them. Asked further was it not desirable that this work should be expedited and that four different groups of Government-employed architects should not have the same privilege to cause delay, the Minister replied: The hon. Member is making an allegation without bringing any evidence in support of it. (26 June 1947.)

Metal Railings (Replacement). Asked whether a decision had yet been reached in the case of metal railings and gates requisitioned for war purposes, either to replace them where desired, or to compensate their owners for their removal, the Minister of Works replied: The Government cannot accept responsibility for the replacement of such railings nor can any payment be made over and above the compensation legally payable. (2 July 1947.)

MINISTRY OF HEALTH CIRCULARS. **Circular L.R.L.8/47** dated 29 May 1947 deals with the repair and maintenance of requisitioned premises by Housing Authorities in the London Civil Defence Region. Repairs should be limited to the minimum necessary to provide reasonable accommodation and to prevent deterioration of the structure. Prior approval of the Ministry will not be required where the estimated cost of the repairs does not exceed £50 per dwelling unit, this limit being related to any individual complete job of repair undertaken at any time.

Prior approval of the Ministry is required for works of repair exceeding £50. Local Authorities are asked not to seek to recover from owners contributions towards the cost of repairs as this is likely to embarrass the District Valuer in his negotiations for the settlement of claims under Section 2 of the Compensation (Defence) Act 1939. Records of repair should be kept so as to be available to the District Valuer and should contain a detailed description of the work carried out, the actual cost and the date of the repairs.

While the foregoing observations apply in cases which the District Valuer has agreed compensation on an inclusive basis, i.e., where the repair and upkeep are the responsibility of the owner, it will still be necessary to approach the owner if the cost exceeds £10 and the owner declines to contribute towards the cost either directly or by way of abatement of the agreed rent otherwise due to him, and recovery cannot be made under the terms of the owner's agreement with the Council. The papers should in the first place be passed to the District Valuer for his observations as to whether the compensation should be re-assessed on the normal Section 2 (1) (*a*) basis.

Circular 95/47 dated 2 June deals with the preparation and issue of building licences. Forms CL. 1136A and 1136B have been revised so that both incorporate the application for a timber licence and a separate application will not be required. Where a licence is to be granted Form 1136A or 1136B will be sent by the local authority to the Principal Housing Officer with a copy of the building licence. This Officer will then issue the timber licence and send it direct to the applicant and endorse and return the Form 1136A or 1136B to the local authority. Where a further timber licence is required for the same work in a subsequent quarter the applicant should apply direct to the Principal Housing Officer by letter quoting the number of the building licence. This procedure applies to housing work and war damage repairs costing over £100, excluding cost of works houses. The same procedure will apply to work costing £100 or less except that the application form and a copy of the building licence will be sent to the Timber Control Area Officer who will issue the timber licence.

Where the application for a building licence has been signed on behalf of the building owner by the architect, the licence should be sent to the building owner care of the architect. This instruction cancels paragraph 1 of appendix A to Circular 8/47.

Paragraph 2 of appendix B to Circular 8/47 has been amended to read: 'Where a local authority is satisfied that an owner does not propose to use any paid labour and that he has the necessary materials in his possession, it is suggested that a licence should not ordinarily be refused whether or not the work is concerned with a dwelling.'

A Supplement to Circular 76/46 states that steps have been taken to improve the colour and texture of interlocking tiles where necessary and to increase the production of well-designed concrete and clay interlocking tiles, as these require less material for a given area than plain roofing tiles. Local authorities are advised to make the fullest use of these tiles in view of the likelihood of earlier deliveries and also the saving in cost and the amount of timber used.

Coloured asbestos cement slates it is hoped will be in production in July, although supplies will be limited at first.

Circular 114/47 states that the Minister of Health has extended the time for the exercise of the power of requisitioning unoccupied houses until 31 December 1947. The power is exercised by Clerks of local authorities.

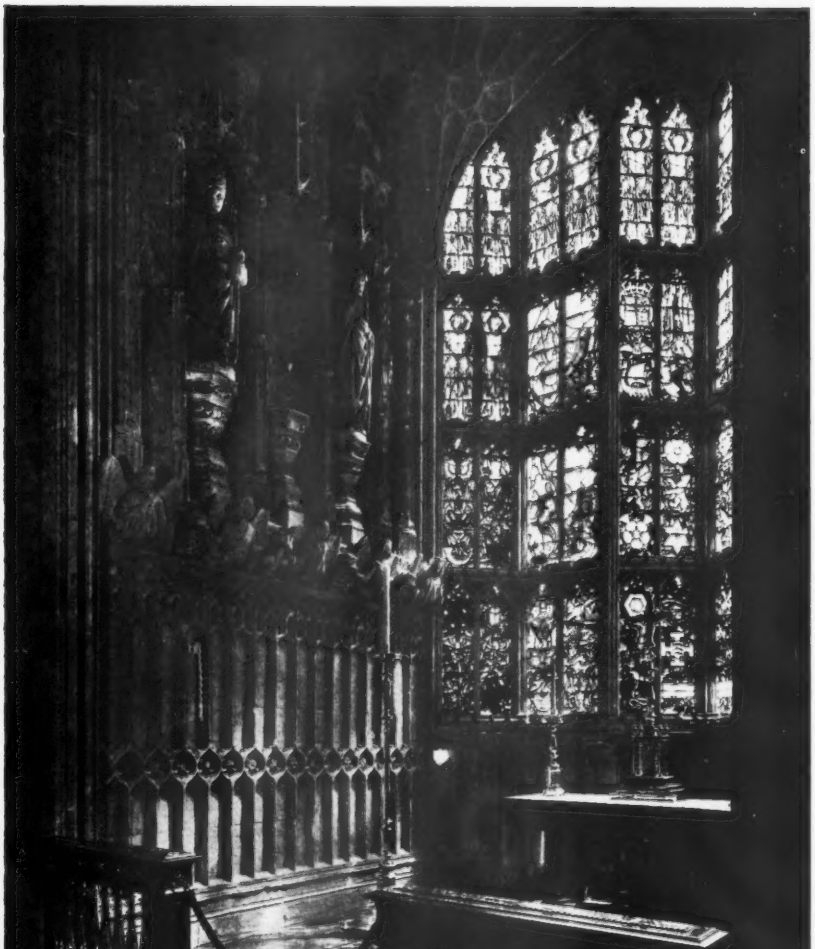
WAR DAMAGE VALUE PAYMENTS. The War Damage Commission warns claimants that there will be delay in making value payments where the payment has to be shared, if the forms setting out the amounts of the shares, as agreed between the interested parties, are not completed and returned promptly to the appropriate regional offices. Up to date about 100,000 forms relating to shares in 40,000 value payments have been issued to claimants, but in only 2,000 cases has the Commission been advised of the agreed shares. The Commission will deal with cases in the order in which the share forms are returned completed, and claimants who fail to return the forms promptly will prejudice their chances of receiving payment on the first payment date.

MINISTRY OF WORKS. Circular MOW/37/47, PI.73 states that the Minister has authorized an increase of (approximately) 6 per cent in the prices of Standard Wood Panelled Doors and 20 per cent in the prices of Standard Casement Wood Windows. Both these increases operate as from 1 June 1947. The Report by the Committee appointed by the Minister of Works on Cement Costs has now been published and is obtainable at H.M. Stationery Office, price 9*d*.

An economy memorandum on the use of lead has been issued by the Ministry of Works and gives the restrictions and the alternatives that may be used.

GREATER LONDON PLAN. The Ministry of Town and Country Planning have issued a memorandum on the Report of the Advisory Committee for London Regional Planning, obtainable at H.M. Stationery Office, price 1*s*. 6*d*.

LAW CASE. Eyre and Another *v.* **Rea.** The defendant, the assignee of a lease, granted sub-leases of parts of the premises to five sub-tenants who, by arrangement with him, converted the premises into five separate flats. The defendant thereby was guilty of breaches of covenants in the lease not to alter the internal planning of the premises, not to permit the premises to be used otherwise than as a private dwelling house in one occupation, and not to underlet or part with the possession of any part of the premises. In an action by the landlord for breach of covenant the judge refused a claim by the defendant for relief against forfeiture under s. 146 (2) of the Law of Property Act, 1925, and granted a decree of forfeiture and an order for possession. On a claim by the landlord for damages for breaches of covenant the judge held that the measure of damages prescribed in the Landlord and Tenant Act, 1927, s. 18, for breach of covenant to keep and put premises in repair should not be extended to a breach of this nature and, notwithstanding the fact that the premises, as converted, were, from a financial point of view, more valuable, the plaintiffs were entitled to the cost of restoring them to the state of an unconverted single dwelling-house, plus the loss of rent during the period of conversion. (1947. 1 All E.R. 415.)



The Battle of Britain Memorial Chapel

ON 10 July His Majesty the King unveiled the memorial to the men of the Royal Air Force who fell in the Battle of Britain. The easternment chapel of the chevet of the Chapel of Henry VII in Westminster Abbey has been given a new stained glass window to replace the one blasted out by a bomb; there are a new altar, altar rail, cross, candlesticks and candelabra.

The window forms the principal part of the memorial. It is by Hugh Easton and its 48 lights, which fill the whole east wall of the chapel, contain the badges of the 63 fighter squadrons which took part in the battle and various symbolical pictures, the whole being linked together with a pattern of the Rose of England. At the foot are Shakespeare's words: 'We few, we happy few, we band of brothers.'

The altar, in English walnut, has been designed by Professor A. E. Richardson, R.A. [*F*]. It bears on the front the royal cypher supported by figures representing King Arthur and St. George, the work of A. F. Hardiman, R.A. The cross, candlesticks, candelabra and altar rail are of silver and were designed by J. Seymour Lindsay. The Roll of Honour, illuminated by Miss E. Alcock, stands on a wrought iron lectern, also designed by J. Seymour Lindsay, just outside the altar rail. It bears the names of 1,495 deceased airmen.

Notes from the Minutes of the Council

MEETING HELD THE 24 JUNE 1947

Birthday Honours

The congratulations of the Council have been conveyed to the members who received the following awards in the Birthday Honours List: *Knight Bachelor:* Mr. C. J. Mole, O.B.E., M.V.O. [*F*]; *C.H.*: Mr. James Bone [*Hon. A.*]; *C.B.E.*: Mr. S. L. G. Beaufoy [*F*], Mr. H. M. Fairweather [*F*]; *O.B.E.*: Mr. W. G. Fraser [*L*], Mr. H. A. N. Medd [*F*], Mr. S. Pointon Taylor [*F*]; *M.B.E.*: Mr. C. Bertram Parkes [*L*]; *I.S.O.*: Mr. G. Howard Jones, M.C. [*A*].

Appointments

Ministry of Works Codes of Practice Committee on Mechanical Refrigeration: R.I.B.A. Representative: Mr. Robert Newton Vanes [*F*].

Ministry of Fuel and Power: Mining Subsidence Committee: R.I.B.A. Representative to give evidence: Mr. S. W. Milburn [*F*].

B.S.I.: Builders' Plant and Equipment Industry Standards Committee: Mr. C. J. Epril [*F*].

Technical Committee CHE/18—Metallic Finishes, Sub-Committee CHE/18/1—Colour, Metallic Finishes: Mr. Cecil Stewart [*A*].

Technical Committee BMB/1—Bituminous Felt and Damp-proof Courses: Mr. H. L. Curtis [*F*].

Technical Committee CHE/16—Dustbins and Storage Containers: Mr. W. W. Atkinson [*A*].

British Architects' Conference, 1947

It was resolved by acclamation that a hearty vote of thanks be passed in favour of the President and Council of the Royal Institute of the Architects of Ireland and all those who offered hospitality and contributed to the success of the recent Conference in Dublin.

Sigismund Goetze Bequest

The Council have acknowledged with deep appreciation and gratitude a further gift of £1,000 from Mrs. Goetze for addition to the Sigismund Goetze Fund.

R.I.B.A. Bronze Medal: Leicester and Leicestershire Society of Architects

The Council approved the recommendation of the Leicester and Leicestershire Society that the R.I.B.A. Bronze Medal be awarded to Messrs. Symington, Prince and Pike, 1, West Street, Museum Square, Leicester, for the design of the Southfields Library, Parks Estate, Saffron Lane, Leicester.

The Ashpitel Prize, 1946

The Ashpitel Prize, 1946, has been awarded to Miss Wendy Harries [*S*], of Swansea, who gained the highest marks in the Final Examination held in 1946.

Post-War Private Practice

The Council have approved a proposal to set up an Advisory Panel to furnish advice to younger members of the profession in London who choose to apply to the Secretary for confidential guidance on the question of entering into private practice.

The Allied Societies are also being invited to set up panels for the purpose in their respective areas.

Revision of the Scale of Professional Charges

The Council have approved the following revisions, subject to the provisions of Bye-law 38:

(A) *Clause* 2 (*a*) (*ii*); That £200 and £4,000 be substituted respectively for £100 and £2,000 as

the contract sums applicable to the basic percentage scale.

(b) Until further notice, on all final accounts for fees chargeable under Clauses 2 and 7 up to and not exceeding a total of £1,150 there shall be a surcharge of 15 per cent on the first £1,000 of the fee.

Full details are published in this issue of the JOURNAL.

Portfolios of Photographs for Use in Schools
The Council have approved a proposal by which the firm of School Prints in collaboration with Messrs. Lund Humphreys will publish sets of really good architectural photographs with explanatory scripts for use in schools in connection with lectures and talks. It is hoped to issue these at the rate of one set per term starting in the autumn and Mr. Cecil Stewart [*A*], will edit the first set. These sets will have the official recognition of the Institute and it will be recorded in each set.

Exhibition of Competition Designs
The Council have approved the continuation in force until 1 July 1948 of the footnote to Clause 8 of the Regulations governing the Promotion and Conduct of Architectural Competitions by which designs may be exhibited in relays in cases where there are a large number of entries for a competition and accommodation is scarce. The relaxation of the requirements of Clause 8 of the Regulations and Clause 15 of the Model Form of Conditions is continued accordingly.

Two or More Architects commissioned to prepare Designs for the Same Project
The Council have authorized the substitution of the sum of £100,000 in place of £50,000 in the footnote to Clause 3 of the Regulations governing the Promotion and Conduct of Architectural Competitions and in the footnote to Clause 8 of the Code of Professional Practice.

Architectural Science Board: Correspondents in Areas of Allied Societies Overseas
The Council have approved a proposal that Overseas Allied Societies should be invited to appoint correspondents to maintain liaison with the A.S.B.

Membership
The following members were elected: as Fellows, 11; as Associates, 66; as Licentiates, 18.

Election: 14 October 1947: Applications for election were approved as follows: as Honorary Corresponding Members, 5; as Fellows, 11; as Associates, 14; as Licentiates, 17.

Election: 14 October 1947—Overseas Members: Applications for election were approved as follows: as Fellows, 5; as Associates, 19.

Students: 40 Probationers were elected as Students.

Applications for Reinstatement: The following applications were approved: as Associate: Elwyn Leighton Black; as Licentiates: Ian Jeffcott, Raymond Walker.

Resignations: The following resignations were accepted with regret: Cecil Herbert Morgan [*Retd. F*], Mrs. Jessie Elizabeth Bassett [*A*], Edward Carter [*A*], Mrs. Eileen Heywood [*A*], John Charles Robinson [*A*], Norman Fisher [*L*], Edward Priestley-Cooper [*L*].

Applications for Transfer to Retired Members' Class under Bye-law 15: The following applications were approved: as Retired Fellows: Eugene Payette, Robert George Roberts; as Retired Associates: Charles Michael Childs, Andrew Blayney Hamilton.

Obituaries: The Secretary reported with regret the death of the following members: The The Right Hon. The Earl of Harewood [*Hon. F*]
Joseph Vago [*H.C.M.*].
Alfred Ernest Biggs [*F*].
Ernest Whitfield Burnett [*F*].
Edward John Walters [*F*].
John William Gilmour Wilson [*F*].
Goodman George Winbourne [*F*].
Francis William Langman [*A*].
Henry Edward Alfred Scard [*A*]. Killed on Active Service.
Mr. Scard was R.I.B.A. Archibald Dawnay Scholar 1934 and R.I.B.A. Recognized Schools Silver Medallist 1936.
Charles Cecil George Webb [*A*]. Killed on Active Service.
Charles Frederick Newcombe [*Retd. A*].
Arnold Seaward Taylor [*Retd. A*].
George Embleton Gibson [*L*].
Thomas Moore [*L*].
Mr. Moore was a former President-in-Chief the Institute of South African Architects.
Walter Pamphilon [*L*].
Arthur Charles Russell [*L*].
Mr. Russell was for many years Honorary Registrar of the Essex, Cambridge and Hertfordshire Society of Architects.
Edgar Stevens [*Retd. L*].
Leslie Ball [*Student*]. Killed on Active Service.
Leon Reginald Goad [*Student*]. Killed on Active Service.

Notes and Notices

NOTICES

Session 1946-47 Minutes X
At the Eleventh General Meeting of the Session 1946–47, held on Tuesday 24 June 1947, at 6 p.m.

Sir Lancelot Keay, K.B.E., President, in the Chair.

The meeting was attended by about 80 members.

The Minutes of the One Hundred and Ninth Annual General Meeting, held on 5 May 1947, having been published in the JOURNAL were taken as read, confirmed and signed as correct.

The following members attending for the first time since their election were formally admitted by the President:—

AS FELLOW:
The Hon. Godfrey Samuel.

AS ASSOCIATES:
R. R. Bryant; E. W. Chandler; Bernard Claydon; P. McG. Corsar; J. H. Denyer; A. H. Edmonds; A. C. Elliott; M. A. J. Farey; J. A. Farquhar; A. D. Gaymer; J. B. Guise; P. D. Hammond; J. H. Higgins; W. E. Hiner; A. J. Marshall; B. J. Moxham; R. F. Neave; D. C. Purcell; D. A. H. Ritchie; H. M. Tansley; K. J. V. Watson; John Whinnett; G. F. Whitby; L. S. White.

AS LICENTIATES:
A. H. Howard; D. E. J. Knapp; W. L. Micklewright; F. S. Seagrim; R. F. Shaw.

The Secretary having read the report of the Scrutineers on the result of the Annual Election for the Council, the President declared that the President, Members of Council and the Honorary Auditors for the Session 1947-48 were duly elected in accordance therewith.

On the motion of the President, a vote of thanks was passed by acclamation to the Scrutineers for their labours, and was briefly responded to by Mr. Ernest G. Allen [*F*], Chairman of the Scrutineers.

The proceedings closed at 6.20 p.m.

Disciplinary Action
Mr. William Beech, of the Chamber of Commerce Buildings, Cumberland Place, Southampton, a Licentiate, was reprimanded by decree of the Council, dated 24 June 1947, made pursuant to the Bye-laws.
Mr. G. H. Gatley, of 9 Lifeboat Avenue, Skegness, an Associate, was reprimanded by decree of the Council, dated 24 June 1947, made pursuant to the Bye-laws.
Mr. Sidney T. Hennell, of 47 High Street, Bognor Regis, a Fellow, was reprimanded by decree of the Council, dated 24 June 1947, made pursuant to the Bye-laws.

Cessation of Membership
Under the provisions of Bye-law 21 the following have ceased to be members of the Royal Institute:—

AS FELLOW:
Mohammad Fayazuddin.

AS ASSOCIATES:
John Greenfield Grace; Yahya Cassumji Merchant; Cyril Maxwell Taylor.

R.I.B.A. Library Hours
August
Reference Library: Closed.
Periodical Room:
Monday-Friday, 10 a.m.—5.30 p.m.
Saturday, 10 a.m.—1 p.m.
Loan Library:
Monday-Friday, 12 a.m.—2 p.m.
Saturday, 12 a.m.—1 p.m.

Note:—Books from the Loan Library will continue to be issued by post.

September to July
Monday-Friday, 10 a.m.—7 p.m.
Saturday, 10 a.m.—5 p.m.

Members Serving with the Forces
Decorations and Distinctions
Bedingfield, E. E. [*A*], Capt. R.E. Awarded Efficiency Decoration.
Bulbeck, R. S. [*S*], Capt., R.E. Awarded Efficiency Medal.
Orchard, L. N. [*S*], R.A.F. Awarded the D.F.C. and Mentioned in Despatches.

BOARD OF ARCHITECTURAL EDUCATION

Rome Scholarship in Architecture: Exhibition of Final Competition Designs
The designs submitted in the Final Competition for the Rome Scholarship in Architecture will be on exhibition at the R.I.B.A. from 25 July to 2 August.

The Scholarship is provided by the R.I.B.A., which makes a grant of £750 a year to the British School at Rome, and is awarded by the Faculty of Architecture of the British School at Rome. The scholar is required to go to Rome to study for a period of two or three years.

R.I.B.A. Final Examination.—Distinction in Thesis
Mr. L. W. C. Phillips [*S*] (London) has been awarded Distinction in Thesis for his Final Examination thesis.

R.I.B.A. Examination for the Office of Building Surveyor under Local Authorities
At the Examination held 7–9 May 1947 the following were successful: Mr. Sydney E. Cross (Rhyl, Flintshire), Mr. Idris Thomas

(Gloucester) and Mr. Frederick J. Watts (Cranbrook, Kent).

Dates of forthcoming R.I.B.A. Examinations

Intermediate Examination

November 7, 8, 10, 11 and 13, 1947.
(Last day for receiving forms of application: September 19, 1947.)
May 7, 8, 10, 11 and 13, 1948.
(Last day for receiving forms of application: March 10, 1948.)
November 5, 6, 8, 9 and 11, 1948.
(Last day for receiving forms of application: September 16, 1948.)

Final and Special Final Examinations

December 3, 4, 5, 6, 8 and 9, 1947.
Oral Examination London Centre, December 12.
(Edinburgh and Belfast Centres, December 11.)
(Last day for receiving forms of application: October 15, 1947.)
June 30, July 1, 2, 3, 5, 6 and 8, 1948.
(Last day for receiving forms of application: May 4, 1948.)
December 1, 2, 3, 4, 6, 7 and 9, 1948.
(Last day for receiving forms of application: October 7, 1948.)

Examination of Licentiates to qualify for Candidature as Fellows

December 3, 4, 5, 6 and 8, 1947.
(Last day for receiving applications: October 1, 1947.)
June 30, July 1, 2, 3 and 5, 1948.
(Last day for receiving forms of application: April 30, 1948.)
December 1, 2, 3, 4 and 6, 1948.
(Last day for receiving forms of application: September 30, 1948.)

Examination for Building Surveyors

October 8, 9 and 10, 1947.
(Last day for receiving applications: August 27, 1947.)
April 21, 22 and 23, 1948.
(Last day for receiving applications: March 5, 1948.)
October 6, 7 and 8, 1948.
(Last day for receiving applications: August 26, 1948.)

Building Surveying Examination

The R.I.B.A. Examination qualifying for candidature as Building Surveyor under Local Authorities will be held at the R.I.B.A. on 8, 9 and 10 October 1947.

Applications for admission to the examination must be made not later than 27 August on the prescribed form, to be obtained from the Secretary, R.I.B.A.

Leverhulme Scholarship in Architecture, 1947

The Leverhulme Scholarship, tenable at The Architectural Association School of Architecture, London, value £1,000, which includes payment of fees and maintenance for five years, has been awarded this year to Mr. Julian Keable, of Sittingbourne, Kent (and St. Christopher School, Letchworth).

COMPETITIONS

COMPETITION RESULT

Messrs. Mitchells and Butlers, Ltd.: Limited Competition for Licensed Premises, Birmingham.

1. Mr. T. Cecil Howitt [*F*].
2. Mr. Oliver Hill [*F*].
3. Messrs. W. Alexander Harvey and H. Graham Wicks [*F*/*F*].

Bessingby Housing Estate, Bridlington—Correction

The word 'Bessingby' which preceded the words 'Town Council' in the first line of the notice on page 440 of the June JOURNAL concerning this competition should, of course, have been 'Bridlington', as there is no such local authority as 'Bessingby Town Council'.

ALLIED SOCIETIES

The A.A. Council's Report for the Session 1946-47

The following are extracts:—

The 100th session of the Architectural Association ended on 31 May 1947. Arrangements are being made for the Association's centenary to be celebrated in December 1947. During this session the Association has not only returned to its full pre-war activity but the Council has started new activities and is contemplating others which are in accordance with the Association's century old tradition as the principal force in architectural education in the British Empire. The Council has acted upon its long-accepted principle that architectural education demands something more than a highly-efficient school for students and that it does not end with the student obtaining his Diploma. The Council has therefore adopted a progressive policy in its general activities, as well as re-organizing and re-equipping the school.

School and Accommodation The Council's primary consideration during the early part of the session was given to the provision of sufficient school accommodation for the many ex-service men and women returning to complete their architectural training. By September a temporary building had been erected in Morwell Street, at the rear of the main studio block, and space was available in all the Association's premises to house nearly 500 students. The teaching staff was increased and under the direction of the Principal, Mr. R. Gordon Brown, some 440 students were enrolled for the opening of the school year. On 31 December the Refresher Course closed. This course, which was attended by 81 members, was instituted in September 1945 for the benefit of qualified architects returning from the Forces.

Careful consideration was given to the repair of the premises at Nos. 34, 35 and 36 Bedford Square and to the repair and re-conditioning of the furniture and equipment, and works amounting to over £6,000 were authorized, the execution of the programme being dependent upon the issue of the necessary building licences. The club room and catering service was augmented and the members' accommodation was reinstated at its pre-war standard.

Architecture Abroad The session has seen a remarkable recrudescence of the Association's foreign contacts, greater even than before the war. The first Annual Excursion to be organized since 1939 was held in August 1946, a party of 25 members, led by the President, visiting Denmark and Sweden. Parties of students totalling 50 also toured these countries. The Principal visited the Ecole des Beaux Arts for the purpose of expanding contacts between the two schools. Many distinguished foreign architects visited the Association during the Session and were entertained by the Council; some gave addresses in the School. The delegates of the International Reunion of Architects were entertained by the Council at a reception, held in the library, during their Conference in September. At the end of the session arrangements were made for a two weeks' visit to this country of a party of Danish architects and students in June 1947.

Visits in Great Britain The Council commenced a series of visits to places of architectural and technical interest in Great Britain. The first of these, to the London Brick Company's works at Stewartby, attended by 30 members, occurred during the Session; others have been arranged. Parties of students have also visited the Building Research Station and Forest Products Research Laboratory under the direction of the Principal.

Other Matters The Report also lists the General Meetings and papers delivered at them, reports that the library now contains 8,500 volumes and the slide collection 5,000 slides and states that the membership of the Association is now 2,310. A donation of £100 was made to the Canterbury Cathedral Fund.

Northants, Beds and Hunts Association of Architects Annual Meeting

The Annual Meeting of the Northants, Beds and Hunts Association of Architects was held on Tuesday 3 June at Northampton.

Mr. W. R. Steel [*F*], of Luton, who has held the office of President for the past two years, was thanked for the excellent manner in which he has carried out his duties, and for representing the Association on the Council of the R.I.B.A.

The new President elected for the session to 30 June 1948 is Mr. P. J. J. Panter [*F*], of Wellingborough. Mr. Panter has been an active member of the Council for a number of years, and was elected Vice-Chairman in 1939, and is Chairman of the Northampton Branch. Mr. Steel invested the new President with the badge of office, and in congratulating him said he was confident that the traditions of the Association would be worthily upheld.

The following officers were elected: *President:* P. J. J. Panter [*F*] (Wellingborough). *Vice-President:* H. A. Harris [*L*] (Bedford). *Past Presidents:* W. Rosser [*F*] (Northampton), W. R. Steel [*F*] (Luton). *Members of Council:* F. H. Allen [*F*] (Northampton), F. A. Coles [*L*] (Long Buckby), C. Croft [*L*] (Northampton), B. C. Deacon [*F*] (Bedford and Luton), S. V. Goodman [*L*] (Bedford), W. A. Lea [*F*] (Huntingdon), F. C. Levitt [*L*] (Biggleswade, Beds), E. J. Storry [*A*] (Kettering), H. F. Traylen [*F*] (Stamford). *Hon. Auditor:* F. B. Allen [*L*].

The Hon. Secretary of the Northants, Beds and Hunts Association of Architects is: Mr. P. G. Copson [*L*], 35 St. Matthew's Parade, Northampton.

West Yorkshire Society of Architects—Council's 71st Annual Report

A somewhat gloomy outlook for architectural individualism and professional initiative is portrayed in the 71st Annual Report of the West Yorkshire Society of Architects. Referring in its preamble to a realization twelve months ago that the transition from war to peace was no easy task and that certain war-time restrictions could not at present be jettisoned, the Council state—'Whilst architects in private practice and official architects are free to think great things and plan great schemes, these inspirations and creations are in the main confined to the mind and paper through inability to obtain Building Licences to permit of projects being constructed, or severely compromised by labour and materials shortage. It is now not only more difficult to obtain the requisite permission to proceed but correspondingly more difficult to complete construction once that authority has been obtained. The shortage of essential building materials is now more pronounced than at any time since the cessation of hostilities, and the essential duties of the architect, more than ever restricted by statutory requirements demanding attention to matters, by no means calculated to produce good architecture or speedy buildings.'

After a period of relative inactivity during the war, a feature of the 71st Session of the Society has been the greatly increased activities in General Meetings held during the Session and the gratifying numbers present, as well as the quality of the addresses.

Recommendations have been submitted to the parent Institute on many matters affecting architects and architecture and this, the largest Allied Society in the provinces, has maintained its customary close co-ordination with, and in-

fluence in the R.I.B.A. Council. The Society has also, as heretofore, been invited to advise Halifax Education authorities in adjudicating the 1947 entries for the Halifax Architectural Scholarship and has also made suggestions and advised upon plans for the preservation of rural amenities within its area. The administrative and purely domestic affairs of the Council have proceeded satisfactorily and matters aggravated by war conditions are now being ameliorated. For example, all Society members are to receive a questionnaire to enable the membership records of the Society to be brought fully up to date.

The present membership of the Society is 643, an increase of 23 over the numbers at the end of the 70th Session. The Council report with deep regret the death of the Earl of Harewood, K.G., D.S.O., Hon. Member of the Society, Mr. Fred Broadbent [*F*], Mr. Frank Whitehead [*A*] and Mr. J. F. Adams [*S*].

The publication of the Society's *Journal*, under the able direction of Mr. K. A. Jones, is now established, members having received the second post-war edition, and it is hoped to publish the Green Book early in the next Session.

The officers and Council for the 72nd Session (1947–48) are as follows:—*President:* Norval R. Paxton, M.C. [*F*], *Senior Vice-President:* J. R. Tolson [*A*], *Junior Vice-President:* C. Sunderland [*F*], *Hon. Secretaries:* Richard Thompson [*A*] and H. S. Davison [*A*], *Hon. Treasurer:* H. Jackman [*L*], *Members of Council:* As Fellows: J. G. Berry, M.C. [*A*], G. Alan Burnett [*A*], P. W. Walker, J. W. Coates [*L*], John Hardwick [*F*], C. Hickson [*F*], C. E. Horsfall [*L*], W. H. King [*F*], A. V. Montague [*A*], Noel Pyman [*L*], W. Tocher [*A*], W. H. Wilkinson [*L*]. As Associates: W. Clifford Brown [*A*], J. L. Crowther, M.B.E. [*A*], K. A. Jones [*A*].

GENERAL NOTES

'Trends in Reinforced Concrete'

The Reinforced Concrete Association proposes to hold a meeting next October, at which a symposium on 'Trends in Reinforced Concrete' will be presented, and contributions are invited. The symposium will cover the whole field of reinforced concrete-uses, design, construction, materials and plant—and each paper must be limited in length and scope. Opportunity will be given later for the elaboration and fuller discussion of those which appear to be of particular interest or importance.

In order to avoid duplication, those wishing to present a paper should submit a note of their subject with brief synopsis, so that suitable selection may be made. The paper itself should not take more than ten minutes to read. Preliminary notes should reach the Reinforced Concrete Association, 94–98, Petty France, London, S.W.1, not later than 31 July.

F.P.R.L. Timber Exhibition being shown in Leicester

'Timber Research and Building', the Forest Products Research Laboratory exhibition which attracted a record attendance at the R.I.B.A. last May, was shown from 30 June to 12 July inclusive at the School of Architecture and Building, Newarke Street, Leicester.

The exhibition is of interest to all those concerned with building in presenting the essential requirements of economy in timber, viz. the use of timber suitable for the purpose, seasoning, efficient design and preservation against decay and insect attack. Information is also given on flooring timbers, plywood and machining of timber. A Forest Products Research Laboratory officer was present at the exhibition each day for the purpose of answering enquiries.

Cricket R.I.B.A. *v.* A.A.

The annual cricket match between the R.I.B.A. and the A.A. took place on a hot, sunny day at the Elstree Sports ground of the A.A. on 25 June. That the R.I.B.A. won a keenly contested game by 125 runs to 103 is perhaps of less importance than the fact that the players and (few) spectators enjoyed the game, the lunch, the tea and the day generally, Mr. D. S. Taylor captained the R.I.B.A. side, playing a captain's innings and scoring 23 while Mr. A. R. Ballantyne, who captained the A.A. side, was his side's most dangerous bowler taking 3 wickets for 17 runs. The teams were of level quality with, as usual, one or two players outstanding; in particular Mr. C. A. R. Norton contributed greatly to the R.I.B.A. victory by knocking up 34 and then taking 6 A.A. wickets for 43 runs. On the A.A. side Mr. N. A. P. Whichelow seemed well set and hitting fours strongly when, having scored 27, he fell a victim to Mr. Norton.

Score:

R.I.B.A.

P. B. Dunthorne b Rice-Oxley	9
R. W. R. Adams lbw b Rice-Oxley	6
C. A. R. Norton b Ballantyne	34
R. R. Fairbairn caught. b King	9
C. R. Turnor b Rice-Oxley	5
D. S. Taylor run out	23
J. A. Farquahar c & b Farrington	4
P. Napp not out	23
A. G. Savill b Farrington	2
J. S. Hirst b Ballantyne	10
J. M. Wheeler b Ballantyne	0
Extras	0
Total	125

Bowling

Rice-Oxley 3—21. King 1—29. Bird 0—22. Ballantyne 3—17. Farrington 2—22. Atkinson 0—16.

Architectural Association

A. B. King caught. b Norton	4
N. A. P. Whichelow caught. b Norton	27
T. A. Bird b Norton	0
B. N. Atkinson caught. b Norton	0
P. R. Davison b Adams	3
F. Verrall b Norton	8
R. W. Holme run out	6
J. A. Stevens b Dunthorne	19
M. D. Rice-Oxley caught. b Norton	8
A. R. Ballantyne b Adams	9
D. H. Farrington not out	15
Extras	4
Total	103

Bowling

Adams 2—27. Norton 6—43. Dunthorne 1—32.

R.I.B.A. President to be Chairman, Building Exhibition 1947

Sir Lancelot Keay, K.B.E., has consented to be chairman of the Building Exhibition to be held at Olympia from 19 November to 4 December 1947, after an interval of nine years.

Controlling the Exhibition are Mr. H. Greville Montgomery, J.P. [*Hon. A*], and Mr. Hugh R. G. Montgomery, M.C.

Course of School Decoration and Equipment

Through unforeseen circumstances it has not been found possible to continue the arrangements proposed for the Ministry of Education Course on Interior Decoration and Equipment of Schools at the Architectural Association in July, and notified on Page 343 of the April JOURNAL. In view of recent official publications, the subject of Interior Decoration and Equipment of Schools is of considerable interest and it is still hoped that arrangements may be made in the near future for a conference, at which these points might be discussed.

Mr. W. M. Keesey [*A*], H.M. Inspector, Ministry of Education, 41, Temple Row, Birmingham 2, will direct the Course on behalf of the Ministry of Education, when further arrangements can be made.

South-East Essex Technical College Students' Work on View at Building Centre

Examples of architectural drawings, the work of full-time, part-time and evening students of the South-East Essex Technical College and School of Art, will be displayed at the Building Centre from Monday 21 July to Wednesday 30 July inclusive. Members who visit the Building Centre, Conduit Street, London, W.1, may be interested to see these examples of architectural students' work.

Errata

It is regretted that the drawings which illustrated Mr. John Gloag's lecture on 'Preliminary Studies for Industrial Designers', pages 416–18 of the June issue, and the Office Organization Lecture-Discussion entitled 'Architects to Public Authorities', pages 402–09 of the same issue were not ascribed to Mr. John D. Cordwell [*S*] and Mr. W. F. Mullins [*S*] of the Architectural Association School of Architecture.

Membership Lists

ELECTION: 24 JUNE 1947

The following candidates for membership were elected on 24 June 1947.

AS FELLOWS (11)

Bomer: Edward Dixon Neville [*A* 1931].
Burrough: Thomas Hedley Bruce [*A* 1935], Bristol.
Fitton: Roderick Arthur [*A* 1927].
Poppleton: William Claude [*A* 1933], Wakefield.
Reed: William James [*A* 1920].

And the following Licentiates who have passed the qualifying Examination:

Davidson: Charles Stewart Milne, Exeter.
Kirkham: Albert Victor Joseph.
Marshall: Donald Plaskett.
Roberts: Ivan Frederick.
Wilcox: John Wallace.
Wright: Frederick Rossiter.

AS ASSOCIATES (66)

Allan: James Shanks Alexander, Dundee.
Appleton: Harold.
Armstrong: Thomas, Edinburgh.
Baff: Lionel Charles McKew.
Bantin: Charles Edward.
Beloff: Joseph Raymond.
Bloxham: John.
Boning: Ray William, Leeds.
Buchanan: Colin Douglas (Lt.-Col.), B.Sc., A.M.T.P.I.
Burgess: Richard William, Campsie, New South Wales.
Callard: Henry William, Whitchurch, Glam.
Campbell: Keith Shaw, Camberwell, Victoria, Australia.
Castle: Gordon Reuben, Hull.
Caunt: Joseph John Arthur, B.A. (Arch.).
Chappelle: Reginald Thomas, Stafford.
Christensen: Angela (Miss).
Collier: Harold James.
Creak: Harold, Boston Spa.
Dahl: John Blom Seaton.
Day: Geoffrey Edgar Paterson.
Deakin: Frank, Birmingham.
Dean: Robert Stanley.
Deane: Phillip Allen, M.A. (Cantab.).
Devaney: Patrick Alphonsus, Dublin.
Dunn: Ian Gilman.
Fletcher: Harvey Victor, Darlington.
Foreman: Robert Walter, Exeter.
Fouché: Victor François, Durban, S. Africa.
Gill: Oswald, B.A., Newcastle-on-Tyne.

Goodridge: Peter.
Gunaratna: Neville Harris de Silva Abeyesinghe, Melbourne, Victoria, Australia.
Harries: Margaret Wendy (Miss), Swansea.
Hart: Kenneth, West Bridgford.
Hemingway: Richard, Sheffield.
Howlett: Leslie Robert, Stafford.
Humphreys: Henry Robert.
Husband: Raymond Joseph, Wirral.
Ingham: Arthur Samuel, Chester.
Lane: Alexander John.
Launder: Victor Charles, Carisbrooke, Isle of Wight.
Lukacs: Gabor, Bellevue Hill, New South Wales.
Marrable: Beryl Margaret Sarah (Miss).
Maw: Philip Guymer, Huddersfield.
Nibbs: Margaret (Miss).
Nowell: Olive Irene (Miss).
Osman: Percival Frederick Robert, Ipswich.
Phillips: William Francis, B.Arch., Tramore, Co. Waterford.
Pryde: Donald Ian.
Raeburn: Robert.
Robertshaw: George Vincent, Leeds.
Royle: Eric Vernon, Nottingham.
Seow: Eu Jin.
Slack: Joseph, Gedling, Notts.
Smith: Hugh Standing, Durham.
Smith: John Charles, Newcastle-upon-Tyne.
Steel: George, Weymouth.
Stott: Philip Sidney, Stanton Court, (Glos.).
Stroud: Hedley William.
Sykes: Fred Oliver, Leeds.
Symes: Leonard Charles, Pietermaritzburg, S. Africa.
Turnbull: Robert George Haddon, Glasgow.
Wakefield: Victor Hugh, P.A.S.I., Burton-on-Trent.
Wakefield: William.
Ward: John Frank.
Ware: John Lancaster.
Woodford: Charles Albert.

AS LICENTIATES (18)

Bell: Richard Gray.
Benerdello: Henry, Liverpool.
Chalmers: Alan Cyril.
Duncan: Charles Fell.
Fuller: Alan Richard.
George: Leslie Thomas.
Gilford: George, Liverpool.
Harwood: Basil Frederick.
Houghton: John Sanderson, M.A. (Cantab.), Bury St. Edmunds.
Merry: John Lee.
Mole: Walter.
Pembery: Gerald Griffin.
Raeside: James Boyd.
Thomson: Ambrose Martin, Dumfries.
Tothill: Frederick Robert, Exeter.
Turner: Albert, Blackpool.
Wormell: Robert Thomas, Preston.
Wright: William Thyrd, Rutherglen.

ELECTION: 14 OCTOBER 1947

An election of candidates for membership will take place on 14 October 1947. The names and addresses of the candidates, with the names of their proposers, found by the Council to be eligible and qualified in accordance with the Charter and Bye-laws, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary, R.I.B.A., not later than Saturday 9 August 1947.

The names following the applicant's address are those of his proposers.

1st LIST

AS HON. CORRESPONDING MEMBERS (5)

Jofan: Boris, Member of the Academy of Architecture of the U.S.S.R.; Member of the City Council, City Hall, Gibraltar; 56 Governor's Street, Gibraltar. Prof. L. B. Budden, Clifford Holliday and Prof. Sir Charles Reilly.
Presidium of the Academy of Architecture; Member of the Presidium of the Union of Soviet Architects; Chief Architect of the Construction of the Palace of the Soviets. U1. Serafimovicha 2, ap.426, Moscow. Proposed by the Council.

Mordvinov: Arcadi. Member of the Academy of Architecture of the U.S.S.R.; Vice-President of the Academy of Architecture. Tchkalov Str. 23/25, Moscow. Proposed by the Council.

Shioussev: Alexi. Member of the Academy of Architecture of the U.S.S.R.; Member of the Academy of Science of the U.S.S.R. B. Kaloujskaia 13, Moscow. Proposed by the Council.

Vesnin, Victor. President of the Academy of Architecture of the U.S.S.R.; Member of the Academy of Science of the U.S.S.R. Deputy, Supreme Soviet U.S.S.R. Shioukin Str. 8a, Moscow. Proposed by the Council.

Zheltovsky: Ivan. Member of the Academy of Architecture of the U.S.S.R. Stankevitch Str. 6, Moscow. Proposed by the Council.

AS FELLOWS (9)

Eley: Thomas Henry [*A* 1933], Queen Annes Lodge, Westminster, S.W.1; 50 Bowes Road, W.3. F. W. Hagell, Sir Percy Thomas and S. W. Milburn.

Holman: Edward [*A* 1931], Sun Building, Bennett's Hill, Birmingham 2; 'Highover', Hill Village Road, Four Oaks, Birmingham. S. J. Stainton, S. N. Cooke and W. N. Twist.

Morley: Francis Henry [*A* 1912], City of Liverpool Housing Department, Blackburn Chambers, Dale Street, Kingsway, Liverpool; 108 Earlston Road, Wallasey, Cheshire. Sir Lancelot Keay, L. C. Howitt and A. G. Jury.

Stoddart: Robert William [*A* 1920], Truman's Brewery, 91 Brick Lane, Spitalfields, E.1; Holmhurst, Long Road, Cambridge. C. A. Farey, F. G. A. Hall and N. T. Myers.

And the following Licentiates who are qualified under Section IV, Clause 4 (*c*) (ii) of the Supplemental Charter of 1925:

Beer: Ernest Victor, 20 Richmond Road, Exeter; Rydon Bend, Rydon Lane, Exeter. J. Challice, John Bennett and E. E. Kemeys-Jenkin.

Currie: Robert Thom, 12 York Buildings, Adelphi, W.C.2; 54 Blythwood Road, Goodmayes, Essex. Victor Wilkins, C. A. Farey and W. L. Clarke.

Elkins: Charles Henry, P.A.S.I., County Architect, Shire Hall; Warwick; 22 Binswood Avenue, Leamington Spa. A. C. Bunch, S. J. Stainton and A. L. Roberts.

Holdsworth: Ledgar, 35a Woodthorpe Lane, Wakefield. Eric Morley, N. R. Paxton and Victor Bain.

Williams: Harold Percy, Greenroyd, Green Walk, Seaford, Sussex. J. F. Walsh, Eric Morley and T. S. Wood.

AS ASSOCIATES (14)

Biel: Hans [Special Final Exam.], 20 Abbey Road, N.W.8. F. S. Haynes, and applying for nomination by the Council under Bye-law 3 (*d*).

Conder: Hugh Neville (Arch. Assoc. (London): Sch. of Arch.), 807 Howard House, Dolphin Square, S.W.1. G. A. Jellicoe, Graham Dawbarn and A. F. B. Anderson.

Fort: Nicholas (King's Coll. (Univ. of Durham), Newcastle-upon-Tyne, Schl. of Arch.), 38 Wormhill Terrace, Fatfield, Washington, Co. Durham. W. B. Edwards, G. R. Clayton and F. Willey.

Gardiner: George Clifford (Liverpool Schl. of Arch., Univ. of Liverpool), 78 Canning Street, Liverpool, 8. Prof. L. B. Budden, J. E. Marshall and Donald Brooke.

Graham: Robert Malcolm [Special Final Exam.], 22 Bedford Place, W.C.1. W. H. Ansell, H. Lidbetter and A. Bailey.

Griffiths: Jean Megan (The Poly., Regent Street, London: Schl. of Arch.), 11 Jubilee Avenue, Whitton, Twickenham, Middlesex. E. C. Scherrer, J. K. Hicks and A. W. Harwood.

Hickley: William Dennis (Arch. Assoc. (London): Schl. of Arch.), 72 Wellington Road, Hatch End, Middlesex. H. C. Hughes, Peter Bicknell and Graham Dawbarn.

Hill: Christopher Benson [Final Exam.], 1 Sagar Place, St. Michael's Road, Headingley, Leeds, 1. N. R. Paxton, J. E. Stocks and C. Sunderland.

Nicholas: Sydney Eric [Special Final Exam.], 9 Siverst Close, Northolt, Middlesex. A. W. Ruddle, E. S. Ambrose and W. F. Granger.

Owen: Hugh (Arch. Assoc. (London): Schl. of Arch.); 521 Chelsea Cloisters, Sloane Avenue, S.W.3. C. L. Gill, A. F. B. Anderson and Frederick Gibberd.

Raynham: James Ernest [Special Final Exam.], 30 St. Margaret's Street, Rochester, Kent. C. G. Stillman, Maxwell Ayrton and C. D. Andrews.

Rosenberg: Gerhard A.M.T.P.I. [Final Exam.], 52 Savernake Road, N.W.3. D. W. Aldred, A. M. Chitty and Frederick Gibberd.

Whitaker: Edward Anthony (Univ. of Sheffield: Dept. of Arch.), 24 Clarendon Road, Fulwood, Sheffield, 10. Stephen Welsh, W. G. Davies and J. M. Jenkinson.

Wood: Kenneth Martin [Final Exam.], 60 Osborne Avenue, Jesmond, Newcastle-on-Tyne. Lt.-Col. A. K. Tasker, R. G. Roberts and S. M. Richmond.

AS LICENTIATES (17)

Arnfield: Sherratt Martin, Housing Dept., Town Hall, Manchester 2; 1 Cranston Drive, Sale Moor, Cheshire. John Hughes, Prof. R. A. Cordingley and L. C. Howitt.

Beales: Reginald Woodhouse, 3 Neale Street, Ipswich; 91 Constable Road, Ipswich. E. J. Symcox, Maurice Chesterton and E. T. Johns.

Bolton: John, Messrs. Gillespie, Kidd & Coia, 19 Waterloo Street, Glasgow, C.2; 'Hempwood', Lochview Road, Port Glasgow. J. A. Coia, A. N. Malcolm and Jos. Weekes.

Duggan: Herbert Augustine Nelson, c/o Messrs. Stewart and Hendry, 220 Whitechapel Road, E.1; 'Merville', 19 Sussex Way, Cockfosters, Barnet. H. D. Hendry, A. G. MacDonald and S. C. Clark.

Gordon: James John, The Commercial Bank of Scotland Ltd., 14 George Street, Edinburgh; 16 Golf Course Road, Bonnyrigg, Midlothian. J. R. McKay, Leslie Grahame-Thomson and the late John Jerdan.

Horsham: Ronald John Eric, 10 Warren Avenue, Bromley, Kent. G. H. Goldsmith, L. W. Hutson and R. H. Turner.

Lenton: John Edward, Borough Architect's Dept., Newport Corporation, County Hall, Newport; 54 Gaer Park Avenue, Newport, Mon. Johnson Blackett, F. S. Swash and C. F. Bates.

Long: Edward George, Architectural Dept., Borough Engineer's Office, Worthing; 'Pilgrims', 21 Vale Drive, Worthing. K. E. Black, S. H. Tiltman and F. F. Howard.

Mitton: Edward Stanley, War Damage Commission, 14 Leadenhall Street, E.C.2; 262 Long Lane, Hillingdon, Uxbridge, Middx. J. P. Bridgwater, Hurley Robinson and Alfred Forrester.

Rowe: Ernest Ronald, Architect's Dept., Town Hall, Ealing, W.5; 20 Princes Gardens, Ealing, W.5. Paul Badcock, and applying for nomination by the Council under Bye-law 3 (*d*).

Sadler: James, 73/83 Hatton Garden, E.C.1; 12 Stafford Drive, Broxbourne, Herts. C. G. Soutar, H. Lidbetter and Sir Thomas Bennett.

Sinclair: Peter, 305 Wellesley Road, Methil, Fife, Scotland. W. Salmond, J. D. Mills and C. G. Soutar.

Smail: Herbert Morgan, O.B.E., T.D., 9 South Tay Street, Dundee, Scotland; 28 Farington Street, Dundee. J. D. Mills, W. Salmond and C. G. Soutar.

Smart: Cephas Roland Allen, c/o Messrs. Cherrington and Stainton, 2 Priory Street, Dudley, Worcs; 52 Queens Road, Tipton, Staffs. H. Cherrington, S. J. Stainton and J. B. Cooper.

Taylor: Robert Henderson, Architect's Dept., Midlothian County Council; 6 Rintoul Place, Edinburgh 4. J. R. McKay, A. H. Mottram and J. D. Cairns.

Thraves: Lionel Alfred, 'Whitefriar's House,' Friar Lane, Nottingham; 'The Turret', Stanton-on-the-Wolds, Keyworth, Notts. F. W. C. Gregory, F. A. Broadhead and A. E. Eberlin.

Ward: Gordon Willatt, c/o Borough Engineer, Town Hall, Slough, Bucks; Flat 7, Baylis House, Stoke Poges Lane, Slough. N. L. Reece, H. J. Stribling and J. H. Sayner.

ELECTION: 14 OCTOBER 1947

An election of candidates for membership will take place on 14 October 1947. The names and addresses of the overseas candidates, with the names of their proposers, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary, R.I.B.A., not later than Saturday 11 October 1947.

The names following the applicant's address are those of his proposers.

AS FELLOWS (5)

Costello: Frank Gibson [*A* 1936], The City Hall, Brisbane, Queensland; 106 Simpson's Road, Bardon, Brisbane. Prof. A. S. Hook, E. P. Trewern and B. J. Waterhouse.

Dotto: Augustine Louis [*A* 1932], Architect to **Mhatre: Gajnan Baboorao** [*A* 1931], Prospect Chambers Annexe, Hornby Road, Fort, Bombay; 16 Harvey Road, Bombay 7. Claude Batley, C. M. Master and S. H. Parelkar.

Pryce Lewis: Owen, A.A. Dipl. [*A* 1934], University of Cape Town School of Architecture, Rondebosch, Cape Town; 'Prenton', Carr Hill, Wynberg, Cape. Prof. L. W. T. White, L. A. Elsworth and C. P. Walgate.
and the following Licentiate who has passed the qualifying Examination:

Haslam: Frank Claude, P.W.D. Lagos, Nigeria; 24 Lugard Avenue, Ikoyi, Lagos. Thomas Scott, H. A. Porter and C. W. Box.

AS ASSOCIATES (19)

Brustmeyer: Edmund John Valentine (Passed a qualifying Examination approved by the I.S.A.A.), 'Lorraine', Park Avenue, Milverton, Cape Town. Prof. L. W. T. White, Bright Fraser and H. J. Brownlee.

Chan: Kwok Koon (Liverpool Sch. of Arch., Univ. of Liverpool), 51 Great Western Road, Shanghai. Prof. L. B. Budden, Herbert Thearle and J. E. Marshall.

Ellis: Samuel Arthur Gordon, M.B.E. (Passed a qualifying Examination approved by the I.S.A.A.), 184 Eastwood Street, Arcadia, Pretoria. David Stokes, R. F. Jordan and L. H. Bucknell.

Gillespie: Barton Vernon, B.Arch. (Univ. Coll., Auckland, N.Z., Sch. of Arch.), 36 William Denny Avenue, Westmere, Auckland. Applying for nomination by the Council under Bye-law 3 (*d*).

Jack: Alexander Duncan (Special Final), Chester Road, Avondale Salisbury, Southern Rhodesia. F. A. Jaffray, I. D. MacGillivray and J. R. Hobson.

Johns: Ernest Dudley (Passed a qualifying Examination approved by the R.A.I.A.), 33 The Parade, Enfield, Sydney. C. C. Ruwald, J. C. Fowell and Samuel Lipson.

Kruss: Solomon (Passed a qualifying Examination approved by the I.S.A.A.), 'Havna', Copeland Road, Rondebosch, Cape. Prof. L. W. T. White, C. P. Walgate and M. Policansky.

Lasersohn: Lazar, B.Arch. (Rand) (Passed a qualifying Examination approved by the I.S.A.A.), 162, Muller Street, Bellevue, Johannesburg. A. S. Furner, Robert Howden and applying for nomination by the Council under Bye-law 3 (*d*).

Morris: William Rowland (Special Final), H.B.M. Ministry of Works, British Consulate General, Shanghai. R. C. White-Cooper, S. R. Turner and W. A. Ross.

Murray: Atholl James (Passed a qualifying Examination approved by the I.S.A.A.), 803 Jubilee House, 15 Simmonds Street, Johannesburg. V. S. Rees-Poole, and applying for nomination by the Council under Bye-law 3 (*d*).

Neal: Arnold Walter (Univ. Coll., Auckland, N.Z., Sch. of Arch.), Puni Road, Pukekohe, New Zealand. Applying for nomination by the Council under Bye-law 3 (*d*).

Piper: Keith Llewellyn (Univ. Coll., Auckland, N.Z., Sch. of Arch.), 64 Balmoral Road, Mt. Eden, S.I. Auckland. C. R. Ford, W. H. Gummer, and applying for nomination by the Council under Bye-law 3 (*d*).

Rice: Stanley Russell, B.Arch. (Univ. Coll., Auckland, N.Z., Sch. of Arch.), Alma Street, Wyndham, Southland, New Zealand. Applying for nomination by the Council under Bye-law 3 (*d*).

Sakkides: Nicos Onoufriou, A.M.T.P.I. (Final), 5 Digeni Akrita Street, Limassol, Cyprus. Prof. L. B. Budden, B. A. Milier and F. X. Velarde.

Smith: Norman Clarence (Passed a qualifying Examination approved by the R.A.I.A.), 379 Collins Street, Melbourne. J. F. D. Scarborough, W. A. Henderson and C. E. Serpell.

Van der Merwe: Johannes David, Prins., B.Arch. (Passed a qualifying Examination approved by the I.S.A.A.), P.O. Box 14, Citrusdal, C. P. South Africa. D. R. Harper, C.P. Walgate and Prof. L. W. T. White.

Wight: Jack Fraser (Univ. Coll., Auckland, N.Z., Sch. of Arch.), 2 Rodney Street, Durie Hill, Wanganui, New Zealand. Applying for nomination by the Council under Bye-law 3 (*d*).

Wilson: Stuart Anthony, B.Arch. McGill (McGill Univ., Montreal, Sch. of Arch.), 2282 Belgrave Avenue, N.D.G., Montreal. J. C. McDougall, H. L. Fetherstonhaugh and L. A. Amos.

Yuille: William Loddon B.Arch. (Passed a qualifying Examination approved by the R.A.I.A.), 33 Mandalong Road, Mosman, New South Wales. Prof. Leslie Wilkinson, Prof. A. S. Hook and D. K. Turner.

Members' Column

This column is reserved for notices of changes of address, partnership and partnerships vacant or wanted, practices for sale or wanted, office accommodation, and personal notices other than for posts wanted as salaried assistants for which the Institute's Employment Register is maintained.

APPOINTMENTS

Mr. Alfred Akeroyd [*A*] has left the Civil Engineer-in-Chief's Department at the Admiralty, Chamberlain Way, Pinner, Middlesex, having been appointed Assistant Architect to the Government of Northern Rhodesia. His new address is c/o Government Secretariat, Lusaka, Northern Rhodesia.

Mr. D. G. Bannerman [*A*], of Edinburgh, has been appointed Deputy County Architect for Lanarkshire as from 16 June.

Mr. E. W. Beaumont [*L*] has recently taken up the new appointment of Architect and Planning Officer to the Town of Lurgan, Co. Armagh, and would be pleased to receive trade catalogues, etc., at the Gas Showrooms, William Street, Lurgan, Co. Armagh.

Mr. D. J. Langton [*A*] has been appointed to a post in the Chief Engineer's Department, I.C.I. (Gen. Chemicals Division) Ltd., Western Point, Runcorn, Cheshire, and will be pleased to receive trade catalogues, etc. His address is changed to the above.

Mr. Victor Launder [*A*] has been appointed Lecturer and Studio Instructor at the School of Architecture, Southern College of Art, Portsmouth.

Mr. G. E. Magnay [*A*], formerly of 1 Lavender Gardens, Newcastle-upon-Tyne 2, has been appointed Assistant Architect and Town Planner to the Singapore Improvement Trust. His new address will be c/o Singapore Improvement Trust, Singapore.

PRACTICES AND PARTNERSHIPS

Mr. R. S. Batstone [*L*], formerly Staff Architect to Messrs. J. Stone and Company Limited, has entered partnership with **Mr. John S. Hodges** [*A*]. They will practise under the style of **John Hodges & R. S. Batstone** at 52a Cromwell Road, London, S.W.7 (Western 3405) and will be pleased to receive trade catalogues, etc.

The partnership existing between **Mr. C. Neville White** [*A*] and **Mr. Philip B. Herbert** [*A*], practising as Osborn, White & Herbert, was dissolved by mutual consent on Friday, 9 May, 1947. Mr. White is continuing the practice from 190 Broad Street, Birmingham 15, under the style of Osborn & White and Mr. Herbert has resumed practice on his own account at Grosvenor Buildings, Steelhouse Lane, Birmingham 4.

Mr. J. W. M. Dudding [*F*] has resigned his appointment at the Miners' Welfare Commission, and is now practising with **Mr. D. G. Thornley**

[*A*] and **Mr. Norman Summers** [*A*] under the style of **Dudding, Thornley & Summers**, at 30 Regent Street, Nottingham (Nottingham 44196).

Mr. Cyril A. Farey [*F*] has taken his son, **Mr. Michael A. Farey**, M.A. [*A*] and **Mr. John J. Adams** into partnership. They will practise under the style of **Cyril A. Farey, Son and Adams**, at 83 Prince Albert Road, Regent's Park, London, N.W.8. (Primrose 3071.)

Mr. A. Victor Farrier [*A*], for the past 4½ years Assistant Director of Works and latterly Assistant Chief Architect, Ministry of Works, has recommenced private practice at 7 Thornton Hill, Wimbledon, S.W.19 (Wimbledon 2865) under the title, **Harold Bailey and Farrier.**

Mr. A. P. Gainsford [*L*] has commenced practice at Thomson's Falls, Kenya. His address is Barry's Hotel, Thomson's Falls, Kenya.

Mr. A. G. Geeson [*F*], head of the department of Building, Norwich City College and Art School, is equipping a new Building Materials Laboratory and will be pleased to receive trade catalogues, literature, samples, etc., with a view to display. The address of the Building Department of the College is Ipswich Road, Norwich.

Mr. J. P. Grant [*F*] has disposed of his interest in the practice of Grant and Green at 10 High Street, Totnes, Devon, to **Mr. M. S. Green** [*F*], who has taken **Mr. Douglas W. Mitchell** [*A*] into partnership, as from 6 April. The practice will continue under the name of **Grant and Green**, at 10 High Street, Totnes (Totnes 2398) as hitherto.

Mr. Edward Light [*A*], of 19 Buckingham Street, Adelphi, London, W.C.2, has terminated Air Ministry employment and will practise as previously.

Mr. A. T. Marshall [*A*], having resigned his appointment as Town Planning Officer to the Londonderry County Borough Council, is starting in private practice. His address will be c/o Messrs. Lane's Ltd., Princes Quay, Londonderry.

Miss Barbara Osmond [*A*] has recently commenced practice with **Mr. Paul Boissevain**, Dip. Arch., at 65 Portland Place, London, W.1. (Welbeck 7406). In future all communications to Miss Osmond should be addressed to 65 Portland Place, and not to 'Somerville', Duffield Park, Stoke Poges, Bucks.

Mr. S. Penn Smith [*L*] practising at Waterloo House, 2 Hastings Street, New Walk, Leicester (Leicester 22184), will be pleased to receive trade catalogues, etc.

Mr. E. C. Scherrer [*F*] and **Mr. J. K. Hicks** [*F*], practising as **Scherrer & Hicks** at 310 Upper Regent Street, London, W.1 (Langham 4017), have recently opened an additional office at 10 Dover Street, W.1, where they will be pleased to receive trade catalogues, etc.

Mr. Eric H. Skipper [*F*], of Messrs. Frederick W. Skipper & Son [*F*], and **Mr. Edward J. G. Skipper**, of Messrs. George J. Skipper & Son [*F*] and formerly of 7 London Street, Norwich, have entered into partnership and will practise under the style of **Skipper & Partners.** They will practise at 4 Theatre Street, Norwich, to which all future communications should be sent.

Mr. Trenwith Wills [*F*], practising at 24 Yeoman's Row, Brompton Road, London, S.W.3 (Kensington 8581), wishes all communications, trade catalogues, etc., to be addressed to him there and *not* to 'Riverbank', Littlebourne, Canterbury, Kent.

CHANGES OF ADDRESS

Mr. E. S. W. Atherton [*A*] and **Mr. B. E. Brenchley** [*A*] have moved their London office from 36 Paddington Street, W.1 to 9 Mansfield Street, Portland Place, W.1 (Langham 4167/8).

Mr. Maurice R. Dumville (A) has removed to Coastal Chambers, 15 Elizabeth Street, London, S.W.1 (Sloane 2759) and will be pleased to receive trade catalogues, etc.

The office of the Secretary of the Hampshire and Isle of Wight Architectural Association has been moved to 31 Portland Terrace, Southampton, to which address all communications to the Secretary of the Association should now be sent. Mr. J. S. Fowler [*A*], 41 Portland Terrace, Southampton, is the Association's *Honorary* Secretary.

Mr. H. E. Jenner [*A*] has removed to 38 Sunderland Road, Forest Hill, London, S.E.23.

Messrs. Lambert & Oliver [*L*/*L*] will be vacating their West Street, Bridport, address and are removing to new offices at 35 South Street, Bridport, with effect from 4 July.

Mr. Gordon Lee [*A*] has removed from 39 Mount Ephraim Road, London, S.W.16, to 88 Leithcote Gardens, London, S.W.6.

Mr. Leslie A. J. Heywood [*A*] has removed from 'Exon', Elmswood Grove, Northfield Lane, Horbury, Yorks, to 6 Moor Park Drive, Headingley, Leeds 6.

Mr. Walter Lewis [*L*] has removed from Venice Chambers, 61 Lord Street, Liverpool 2 to 34 Castle Street, Liverpool 2 (Central 4639 and Central 9451).

Mr. F. H. W. Rowe [*L*] has removed to 100, Hamilton Road, Reading.

Mr. Norman Royce [*A*] and **Mr. Lawrence A. Butterfield** [*A*], practising under the style of **Royce, Butterfield and Partners**, have removed from 6 Salisbury Court, London, E.C.4, to 1 Staple Inn, High Holborn, London, W.C.1 (Holborn 2641).

Mr. Llewellyn Thomas [*A*] has removed to Dol Menai, Bulkeley Road, Bangor, Caernarvonshire, and will be pleased to receive trade catalogues, etc.

Mr. John Vigour [*A*] announces that his future address will be c/o Barclay's Bank (D.C. & O.) Church Square, Pretoria, South Africa.

PRACTICES AND PARTNERSHIPS WANTED AND AVAILABLE

Associate (40) would be interested to hear of an opening in private architect's office in the South Midlands with early prospects of partnership. Services offered cover wide and detailed experience in industrial, housing, town planning and general practice. Busy office with good prospects essential. Reply Box 70, c/o Secretary, R.I.B.A.

Associate (37), old Bedfordian, at present consultant to group of companies, has increasing private work and so wishes to become partner in established firm, or to form new partnership. Capital available. Will be pleased to meet member with similar ambitions. Reply Box 69, c/o Secretary, R.I.B.A.

Associate (29) requires partnership in South of England or Scotland. Reply Box 61, c/o Secretary, R.I.B.A.

Associate (42) with varied experience in private practice and with local authorities seeks position with view to partnership in September, Southern England preferred. Reply Box 65, c/o Secretary, R.I.B.A.

Catholic architects with ecclesiastical experience and willing to purchase half share of sound London-centred country-wide practice of schools and churches should communicate with Box 67, c/o Secretary, R.I.B.A.

Fellow, wishing to take up practice in Wessex or South-West, wishes to contact any Fellow in those areas willing to associate in partnership or otherwise. Reply Box 57, c/o Secretary, R.I.B.A.

London members (West End office) seek assistant with qualifications for and view to later partnership. Some general experience essential. Reply Box 66, c/o Secretary, R.I.B.A.

Member (41) desires position of responsibility, leading to partnership, 20 years' varied experience, hospitals, licensed houses, factories, housing estates, experienced quantity surveying. Midlands or South Coast preferred. Reply Box 60, c/o Secretary, R.I.B.A.

Required. Qualified experienced assistant for busy general practice in Leeds with view to partnership. Reply Box 62, c/o Secretary, R.I.B.A.

WANTED AND FOR SALE

For sale. *Brand new* 8 in. 3-screw dumpy level with tripod. £45, Telescopic 14 ft. Staff £10 10*s.*, 100 ft. linen tape £1 17*s.* 6*d.*, 100 ft. land chain £3 17*s.* 6*d.*, 42 in. by 29 in. drawing board with stand £12, 42 in. T-square £2 15*s.* Reply Box 58, c/o Secretary, R.I.B.A.

Wanted. Sketches, illustrations, etchings, drawings, books, etc., of the works of Sir Frank Brangwyn and William Walcot. Reply Box 63, c/o Secretary, R.I.B.A.

ACCOMMODATION

Associate, reducing his staff, would sublet (to one firm of architects only) large light office-studio, 30 ft. by 22 ft., overlooking pleasant West End square. Seven windows plus top lights. Could be partitioned. Gas radiators, light fittings, some furniture and drawing equipment. Might arrange joint use of private office adjoining, telephone, staff on occasions. Present lease to June 1950, possibility of renewal. £250 p.a. inclusive, or might share on pro rata basis. Reply Box 59, c/o Secretary, R.I.B.A.

Member requires shortly, one large suite of two or more small rooms in West Central area. Reply Box 64, c/o Secretary, R.I.B.A.

Office of 3 or 4 rooms required. Convenient London district at reasonable rental, for occupation on or before 25 December. Please send full details to Box 68, c/o Secretary, R.I.B.A.